Draft

ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

NEPAL ELECTRICITY AUTHORITY

Submitted to

Asian Development Bank and Nepal Electricity Authority

March 2025

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Abbreviation and acronyms

ADB	Asian Development Bank
AOI	Area of Interest
BES	Brief Environmental Study
BMP	Biodiversity Management Plan
BoQ	Bill of Quantity
CAP	Corrective Action Plan
CDC	Compensation Determination Committee
C-ESMP	Environment, Social Management Plan
ChESCo	Chilime Engineering and Services Company Ltd
CHP	Cultural Heritage Plan
CIA	Cumulative Impact Assessment
CRA	Climate Risk Assessment
C-SEA	Child, Sexual Exploitation and Abuse
DCS	Distribution and Consumer Services Directorate
DED	Detailed Engineering Design
DMS	Detailed Measurement Survey
DPs	Development Partners
DPR	Detailed Project Report
DSS	Decision Support System
EA	Environment Assessment
E&S	Environment and Social
EHSS	Environment, Health, Safety, and Security
EIA	Environmental Impact Assessment
EMP	Environment Management Plan
EPA	Environment Protection Act
EPR	Environment Protection Regulations
EPRP	Emergency Preparedness and Response Plan
ESA	Environmental and Social Assessment
ESCA	Environment and Social Compliance Audit
ESDD	Environment & Social Due Diligence
ESIA	Environmental and Social Impact Assessment
ESF	Environment and Social Framework
ESMP	Environment, Social Management Plan
ESMS	Environment and Social Management System
ESMU	Environment and Social Management Unit
ESS	Environmental and Social Standards
ESSD	Environment and Social Studies Department
FGD	Focus Group Discussion

FPIC	Free, Prior and Informed Consent
FS	Feasibility Study
GESI	Gender Equality and Social Inclusion
GHGs	Greenhouse Gas
GIIP	Good International Industry Practice
GIS	Geographic Information System
GLOF	Glacial Lake Outburst Flood
GoN	Government of Nepal
GPS	Global Positioning System
GRM	Grievance Redress Mechanism
HRD	Human Resource Department
HSMP	Health and Safety Management Plan
IA	Impact Assessment
IEE	Initial Environmental Examination
IFI	International Financial Institution
ILO	International Labor Organization
IPs	Indigenous Peoples
IPPs	Independent Power Producers
IPPAN	Independent Power Producers of Nepal
KPI	Key Performance Indicator
LA/LUR	Land Acquisition and Land Use Restriction
LAA	Land Acquisition Act
LARAP	Land Acquisition and Resettlement Action Plan
LMP	Labor Management Procedure
LRP	Livelihood Restoration Plan
MD	Managing Director
M&E	Monitoring and Evaluation
MIS	Management Information System
MoU	Memorandum of Understanding
MSIP	E&S Management Strategies and Implementation Plan
NEA	Nepal Electricity Authority
NEAEC	Nepal Electricity Authority Engineering Company Ltd
NFDIN	National Foundation for Development of Indigenous Nationalities
O&M	Organization and Management
OCHS	Occupational and Community Health and Safety
OHS	Occupational Health and Safety
PAPs	Project Affected Peoples
PC	Project Construction
PMD	Project Management Directorate
PMP	Project Monitoring Plan

PO	Project Operation
P/OC	Project or Operational Coordination
POM	Project Operational Manual
PPA	Power Purchase Agreements
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
RFP	Request for Proposal
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SSEMD	Social Safeguards and Environment Management Department
TA	Technical Assistance
TMD	Training Management Department
ToR	Terms of Reference
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
VCDP	Vulnerable Community Development Plan
WB	The World Bank
WC	Working Committee
WMP	Waste Management Plan

Executive Summary

With a view to provide a framework to identify, assess, prevent or mitigate, evaluate, and communicate environmental and social (E&S) risks and impacts that may result from management and operational activities by Nepal Electricity Authority (NEA), the Environmental and Social Management System (ESMS) has been prepared with financial support from Foreign and Commonwealth Development Office (FCDO) of the UK Government through Asian Development Bank (ADB). It was developed primarily based on a desk-based literature review, field visits and consultations with officials of Nepal Electricity Authority (NEA) and key government agencies. The NEA working committee and sub-committee members were the key officials involved in providing constructive suggestions during the ESMS development stage.

The ESMS consists of two main elements: the manual that forms the main body of the ESMS including NEA's E&S policy, institutional arrangement and the management guidelines, which cover procedural steps on how to identify and manage E&S risks. It comprises of eight chapters and annexes consisting of detail management plan/guidelines/procedures.

The ESMS:

- *provides NEA with high-level guidance to manage E&S risk and impact by providing a NEA's corporate policy on E&S risk and impact management, risk and impact identification, management protocols, institutional capacity and competency, stakeholder engagement and grievance redress mechanisms.*
- *clarifies the roles and responsibilities for E&S management.*
- *helps NEA to improve its overall performance and enhance its reputation to attract investors through integrating environmental and social considerations into its operations.*
- *facilitates better engagement with stakeholders, including employees, affected communities, and other interested parties, fostering trust and building strong relationships.*
- *assists to comply with the requirements of Development Partners.*
- *facilitates environment-friendly infrastructure within NEA's operations.*

It is believed that NEA staff will use the processes and procedures in this ESMS to identify, screen, assess, and mitigate E&S risk and impact of the project or activity for which they are responsible for, allocate necessary budgetary and human resources, monitor, and document performance, and engage with stakeholders including addressing their grievances. Appropriate institutional arrangement with adequate human and financial resources are required for effective implementation of the ESMS. Furthermore, some standards/guidelines are also required such as guidelines for Free, Prior and Informed Consent (FPIC), compensation for non-title holders, standards for occupational health and safety, labor management procedures among others.

I. INTRODUCTION

1. Despite the NEA's efforts to adopt improved safeguards practices in its operations, a significant challenge arises in ensuring compliance with the environmental and social (E&S) safeguard requirements stipulated by both the national legislations and the requirements of Development Partners (DPs). There is a lack of a robust and consistent Environment and Social Management System (ESMS) that covers both national and DPs' requirements and provides clear guidance and templates for E&S management. Similarly, weak E&S related institutional capacity in the NEA and low level of awareness among the staff are also observed as challenges in E&S management. Therefore, the ESMS has been developed as part of the Asian Development Bank (ADB) technical assistance project REG-TA 10162: Promoting Energy Transition through Regional Cooperation and Integration in South Asia and financed by the United Kingdom Foreign, Commonwealth & Development Office (FCDO) as part of the "Strengthening of NEA Capacity on Environmental and Social Safeguards.

2. Nepal Electricity Authority (NEA) has established this corporate Environmental and Social Management System (ESMS) to provide a framework to identify, assess, prevent or mitigate, evaluate, and communicate environmental and social (E&S) risks and impacts that may result from management and operational activities by NEA and its business partners[1]. The ESMS will ensure that the E&S risks and impacts are managed in accordance with good international industry practice (GIIP) and are aligned with the requirements of development partners (DPs).

3. The ESMS formulation process adopted a participatory, consultative, and transparent approach. It was developed primarily based on a desk-based literature review and consultations with officials of NEA and key government agencies. The consultant team mainly consulted closely with NEA working committee and sub-committee members during the ESMS development stage. Relevant legislative instruments such as LAA 1977, EPA 2019, EPR 2020, E&S standards from DPs, such as the Asian Development Bank (ADB) Environmental and Social Standards (ESS)[2] and World Bank (WB) Environmental and Social Framework (ESF), and other relevant documents were reviewed. In doing so, the NEA's existing E&S procedures and processes were assessed in light of the DPs' E&S standards and used as a basis of this ESMS and expanded or otherwise modified if and where necessary. This is to ensure that the ESMS is built on the existing practices in which NEA staff have implementation experience. Moreover, the consultant team visited Tanahu Hydropower Project, Gandaki Provincial Office and Pokhara Grid Division to understand the ongoing E&S management practice, gaps and challenges faced on E&S implementation, and suggestions to be included in the ESMS. The process is presented in Figure 1.

[1] incl. Independent Power Producers (IPP), contractors, consultants, suppliers, and vendors.
[2] Approved in December 2024

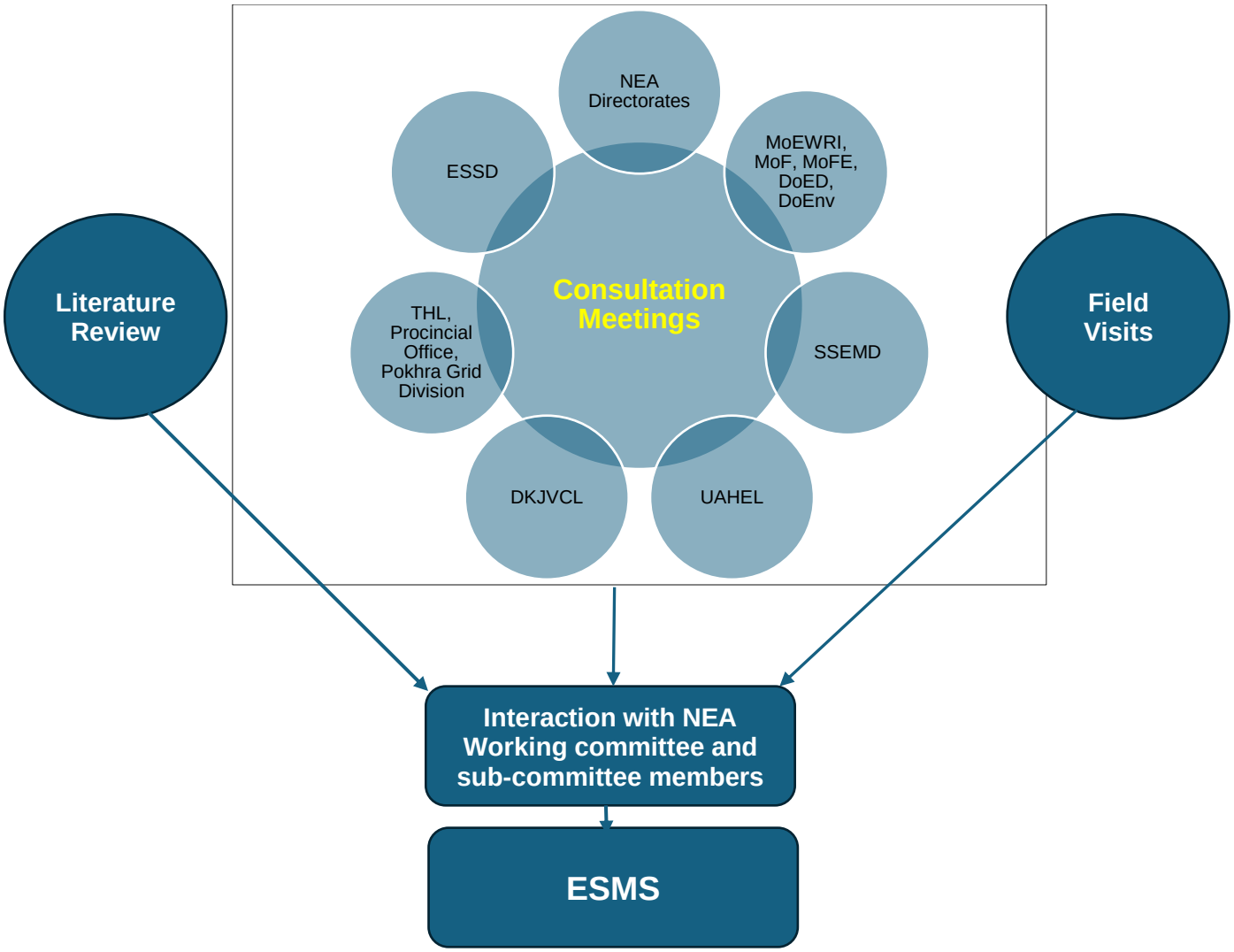


Figure 1: ESMS formulation process

4. NEA intends to apply the ESMS to all of its projects, while it is continuously evaluated and modified based on the implementation experiences, until the ESMS becomes fully functional and applicable to all foreign-funded projects without further adjustments. This ESMS is a living document and will continue to be amended/modified/updated from time to time with approval from NEA's Board.

5. The ESMS aims to provide NEA staff with a high-level guidance to manage E&S risk and impact by providing a NEA's corporate policy on E&S risk and impact management, risk and impact identification, management protocols, organizational capacity and competency, and stakeholder engagement and grievance redress mechanisms. NEA staff will use the processes and procedures in this ESMS to identify, screen, assess, and mitigate E&S risk and impact of the project or activity for which they are responsible, allocate necessary budgetary and human resources, monitor, and document performance, and engage with stakeholders including addressing their grievances.

6. Where projects or activities are funded partially or fully by International Financial Institutions (IFIs), their E&S policies will also be applied so the activities comply with both the ESMS and

the E&S policies of the IFIs. Additional E&S measures may be provided in the Project or Program Operations Manual (POM) of any particular project or program as deemed necessary. For all projects and programs that applies this ESMS, the project specific E&S assessment will need to be conducted based on the guidance provided in this ESMS and domestic legislative provisions in order to address the specific E&S risk and impact of individual project activities.

7. This ESMS consists of two main elements: the manual that forms the main body of the ESMS and the management guidelines, which cover procedural guidelines on how to manage specific impacts.

II. POLICY AND COMMITMENT

A. Background

8. The Nepal Electricity Authority (NEA) is a state-owned and vertically integrated utility established by the Nepal Electricity Act, 1984. It is the Nepal's largest electricity generator and the sole operator of the national transmission grid. The NEA was created in 1985 to improve power generation and operational efficiency and is governed by a board of directors and organized into specialized directorates. Its responsibilities include generating and distributing power, maintaining infrastructure, recommending policies for power sector development, and human resource development.

9. NEA is committed to playing its part in improving and promoting sustainable E&S conditions in the country through its activities and operations. NEA recognizes that it must actively manage E&S risks and impacts to avoid exposing itself to increased reputational, legal, and operational risks.

10. The NEA manages E&S risks for its generation and transmission line projects through its Environmental and Social Studies Department (ESSD) and Social Safeguards and Environmental Management Department (SSEMD). ESSD is part of Engineering Services Directorate and ensures compliance with government and donor requirements. SSEMD focuses on monitoring and managing risks in projects executed by the Project Management Directorate (PMD) which oversees preparation, procurement, and construction, particularly for projects funded by ADB.

11. The NEA has brought into effect this E&S Policy to ensure that it will minimize environmental and social impacts through appropriate mitigation measures when avoidance is not possible. The policy emphasizes adherence to Nepal's environmental and social legal instruments and frameworks and is aligned with international best practice.

B. E&S Policy Statement

12. This Policy is accompanied by the ESMS, which articulates the process & procedures through which NEA will implement this policy and integrate E&S measures into its decisions and risk management processes.

13. NEA is fully committed to avoid, reduce and minimize negative E&S risks in its operations[3]. The policy guides the NEA in assessing the E&S practices of its engagements. Its purpose is to articulate the NEA's approach to effectively identify and manage E&S risks and opportunities throughout all its operational activities.

14. NEA treats all categories of project-affected individuals fairly, providing compensation and assistance proportionate to the impacts of its operations, with the aim of improving their socioeconomic status to at least pre-project levels.

15. NEA believes that effective management of E&S issues is fundamental to success. NEA will continually improve its E&S performance by setting up and monitoring of objectives and

[3] Operations refers to all activities relating to generation, transmission and distribution of energy, including construction and operation of associated facilities.

targets, periodic E&S monitoring, necessary training, engagement with stakeholders, coordination with investors, and management review.

16. The ESMS outlines a clear, systematic approach for the screening, assessing, categorizing, mitigating, monitoring and reporting of E&S risks & issues associated with NEA's operations. The NEA strives to be consistent with relevant national and international standards and best practices.

17. The ESMS includes an Exclusion List, and NEA will refrain from participating in any activities listed therein.

C. E&S Commitments/Provisions

18. NEA is committed to safeguarding the communities and the environment in which it operates, while generating, transmitting and distributing energy to society. It acknowledges that its operational activities may pose potential E&S risks and recognizes that effective management of these issues is critical. It accepts responsibility for addressing them.

19. NEA commits to:

- protecting the natural environment, people and communities by integrating E&S considerations into its operations;
- not financing/investing in the type of activities listed in the E&S Exclusion List (see Annex II);
- incorporating into its processes, an approach that systematically identifies, assesses, mitigates and monitors the E&S risks and potential impacts associated in its activities;
- designating the ESSD as its primary focal point for overseeing E&S risk management activities and ensuring the quality control of E&S processes within NEA operations;
- adopting mitigation strategies to avoid, reduce, or compensate environmental degradation, pollution and adverse social impacts and adapt to the impacts of climate change in its operations;
- identifying, mitigating, or managing all project-related risks to ensure the health, safety, and security of affected communities;
- maintaining a safe and healthy working environment for all employees and workers;
- establishing an occupational safety and health committee/unit at centre or shall designate a safety team to monitor occupational safety and health performance and identify any potential safety issues in its operations;
- establishing a procedure to investigate any major incidents related to environmental, safety or health issues and determine appropriate responses;
- maximizing stakeholder engagement through timely and enhanced information disclosure and meaningful consultation;
- delivering benefits that enhance the livelihoods of communities impacted by its operations;
- minimizing land acquisition and involuntary resettlement, ensuring fair compensation and support for affected households to restore and improve their livelihoods and living conditions as per prevailing laws, standards and good practices;

- promoting biodiversity conservation and sustainable management of natural resources, minimizing environmental impact and protecting ecosystems by integrating available technology with indigenous and local knowledge and practices;
- respect and address the concerns of Indigenous peoples within its operational areas, ensuring their values and needs are appropriately considered;
- Obtaining free prior and informed consent (FPIC) of project affected indigenous peoples' communities where applicable;
- forming appropriate Grievance Redress Mechanisms (GRM), including dedicated units for Child, Sexual Exploitation and Abuse (C-SEA) and Sexual Harassment (SH), that provide affected individuals, communities and concerned stakeholders with an accessible, transparent, fair and effective process for raising complaints about environmental or social harms caused by any operation;
- respecting and maintaining the cultural, heritage, and religious beliefs of communities within its operational areas;
- incorporating gender inclusion into its operations and aligning with international best practices and prevailing policies including NEA's GESI Strategy and Operational Guidelines 2020;
- ensuring the human rights, health and safety of people and communities associated with its operations;
- requiring all staff to understand and uphold E&S standards, publicly sharing its E&S commitments, and maintaining an effective grievance mechanism; and
- providing training and resources to its operational teams to identify and address environmental and social issues.

D. Relevant Standards

20. NEA is committed to complying with national E&S policies, laws, and regulations and gradually aims to be consistent with international standards and best practices for E&S risk management. All national environmental, health, safety and labor regulations and relevant international conventions are applicable to all dealings subject to this policy. While carrying out E&S risk management, all required E&S permits, licenses, and monitoring of E&S parameters are to be considered as mandatory compliance requirements.

21. A list of key national E&S policy and legislation required documentation and permits, and international treaties and conventions to which Nepal is a signatory is provided in Annex III.

22. NEA shall work towards achieving the following ESS, and commit to following them:

- ESS 1: Environmental and social assessment and risk management
- ESS 2: Labour and working conditions
- EES 3: Resource efficiency and pollution prevention
- ESS 4: Health, safety and security of communities and project personnel
- ESS 5: Land Acquisition and Land Use Restriction

- ESS 6: Biodiversity
- ESS 7: Indigenous People
- ESS 8: Cultural Heritage
- ESS 9: Climate Change
- ESS 10: Stakeholder Engagement and grievance management

E. Scope of Policy Application

23. NEA shall systematically identify, assess, mitigate, and monitor the E&S risks associated with its engagements and will determine whether relevant E&S standards have been adequately applied. NEA will consider the risks and impacts of its operations, the impact of such activities on the affected communities, the economic, environmental and/or social aspects.

24. All NEA operations fall under the scope of this policy and ESMS. The exclusion list and initial screening requirements will be applied to all of its operations.

25. The E&S policy is applicable across the organisation and its operations.

F. E&S Policy Implementation

26. NEA will develop and adopt the ESMS to implement this policy.

G. Monitoring, Evaluation, and Reporting

27. E&S issues will be incorporated into the monitoring, evaluation and reporting of its operations. The results of the monitoring and evaluation shall be reported to the NEA Management on a regular basis and to other entities as required. Such reports may also be disclosed through public channels where appropriate.

H. Policy Review

28. NEA will review and update this E&S policy periodically to ensure compliance with relevant national and international laws and alignment with requirements of DPs and other funding agencies. The update will ensure that the overall approach to assessing and managing E&S risk remains relevant and aligns with international best practices and standards.

III. INSTITUTIONAL ARRANGEMENTS

A. E&S Organization

29. NEA has two departments responsible for E&S safeguards: the ESSD which is under the Engineering Services Directorate, and the SSEMD under the Project Management Directorate (PMD).

1. Environment and Social Studies Department (ESSD)

30. The ESSD comprises three divisions: (i) Environment Study, ii) Social Study, and ii) Environmental Monitoring. NEA requires ESSD to assess environmental and social risks and implement mitigation measures. It manages environmental and social aspects for NEA's hydroelectric, solar, transmission line and other projects at various stages and conducts E&S assessments. It also oversees environmental monitoring, mitigation measures, and community support programs for hydroelectric, solar, and transmission projects and prepares E&S monitoring reports as per national/DPs' requirement. The ESSD currently has a total of 28 positions related to environmental and social services.

2. Social Safeguards and Environment Management Department (SSEMD)

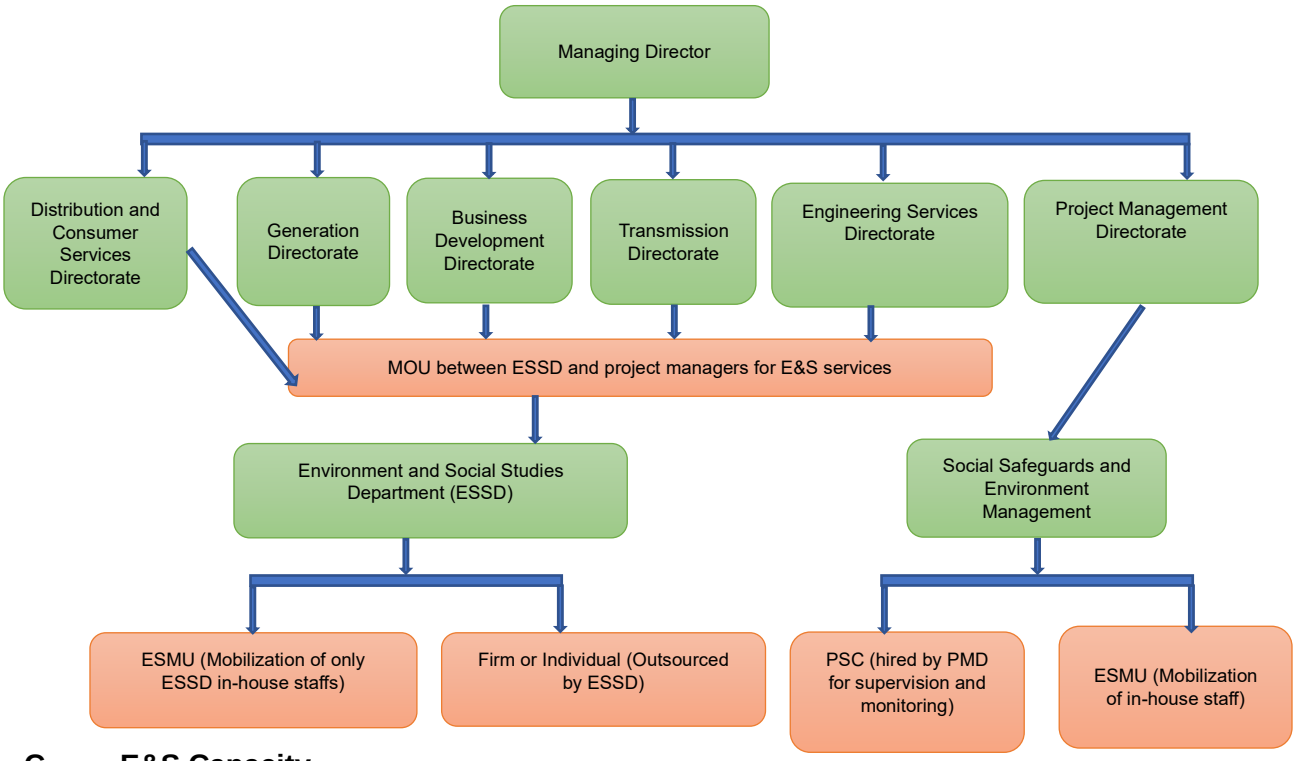
31. SSEMD comprises Environmental Management Division and Social Safeguards Section under the PMD. It is responsible for monitoring and implementation of the social safeguards and environmental mitigation measures in the projects undertaken by the PMD. The department also prepares environment and social monitoring reports for the projects under PMD as per DP requirements. Further, the department conducts the public consultation, public hearing, trainings and awareness programs in the project areas. The department also implement the community support programmes as social responsibility activities, to the project affected communities. SSEMD also implements the Gender Equality and Social Inclusion (GESI) related activities in different projects. The approved number of positions in SSEMD is 15 where 10 are professional staff.

B. E&S Procedures

32. NEA projects are undertaken through either a separate purpose company or assigned to a relevant directorate4 to undertake required studies in the conceptualization stage. After the project is conceptualized, NEA studies the funding arrangement and decides on the project's development partners and a feasibility study is prepared. Following the completion of feasibility studies, a detailed project report (DPR) and environment assessment (EA) is prepared for the project. If the NEA forms a separate company to develop the project, the management of the NEA either assigns the E&S studies to ESSD or contracts consultants. If ESSD is chosen it prepares a financial proposal and implementation plan for review by the steering committee (Engineering Services Coordination Committee) and, if approved, then to the NEA Managing Director (MD) for final approval. The relevant directorates has also been carrying out E&S studies through NEAEC and ChesCo. In most cases, ESSD is involved only in the preparation phase of the project and its association with the project ends once the E&S environment reports are approved by the government. However, in some cases, the ESSD is also assigned the monitoring and implementation of Environment Management Plan (EMP).

[4] Generation Directorate, Transmission Directorate or Project Management Directorate

Based on the scope of the assignment, the ESSD undertakes three types of monitoring tasks, impact monitoring, compliance monitoring and baseline monitoring through the establishment of Environmental and Social Monitoring Unit (ESMU) at the project site. Similarly, SSEMD is also doing the implementation and monitoring of E&S activities through the establishment of the ESMU at project sites. The ESSD hires required E&S personnel for the project ESMU to implement E&S safeguard activities on the ground. In general, the ESMU consists of social safeguard officials, environmental safeguard officials and OHS officials. The ESSD supervises and monitors the ESMU.



C. E&S Capacity

1. Assessment

33. NEA has identified several areas where its E&S capacity has some issues:[5]

- ***Roles and Responsibility***: ESSD and SSEMD manages E&S risks for NEA's projects, but other directorates/departments/subsidiary companies often handle E&S activities independently, leading to inconsistent practices. There are concerns about the time taken to finalize MoUs with ESSD.

- ***Coordination***: Coordination among NEA entities and external stakeholders is often weak, affecting planning, implementation, and monitoring of E&S safeguards.

[5] World Bank and ADB. 2020. Institutional capacity assessment of Nepal Electricity Authority in environmental and social risk management, Kathmandu, Nepal; and NEA. 2024. Nepal Electricity Authority: A Year in Review Fiscal Year 2023/24. Nepal Electricity Authority, Kathmandu; and Institutional capacity assessment of Nepal Electricity Authority on environmental and social safeguards (Working paper ADB/FCDO TA Team 2025)

- ***Management Information System***: NEA has inadequate systems for maintaining databases and documents related to safeguards, risking loss of institutional memory.

- ***Human Resources***: NEA's existing human resources are insufficient for E&S work. ESSD lacks sectoral experts and faces challenges in land acquisition and resettlement. There are no forestry officers or aquatic ecosystem specialists, impacting the quality of environment assessment reports.

- ***Training and Exposure***: ESSD staff are incapacitated in modern tools and emerging subjects, as well as exposure to good practices from other countries.

- ***Motivation and Career Growth***: While NEA offers financial incentives for ESSD staff, limited career growth opportunities hinder motivation and the ability to attract experienced practitioners. Differences in allowances between departments also demotivate staff.

- ***Grievance Redress Mechanism***: NEA lacks a centralized GRM, which would provide better visibility and consistency in addressing stakeholder issues.

- ***Occupational and Community Health and Safety***: NEA does not have a dedicated division for Occupational and Community Health and Safety (OCHS), and safety officers are missing at distribution centres. Despite mandatory Occupational Health and Safety (OHS) training and Personal Protective Equipment (PPE) provision, there is reluctance in PPE usage among staff.

2. Commitment to address Capacity gaps

34. NEA is committed to streamline E&S responsibilities (and possibly restructuring in the longer term) to ensure better coordination, oversight and quality control.[6] NEA will also ensure better internal and external coordination through the procedures, commitments and processes outlined in this ESMS. Improved monitoring is outlined in Chapter 6 of this ESMS and will be further developed through an improved M&E/MIS/DSS.[7] NEA is committed to ensuring it addresses all its E&S safeguard commitments through reorganisation of both human and financial resources and this ESMS provides a basis for that.

D. Immediate Organizational structure for ESMS implementation

35. Based on this ESMS and NEA commitments, and the assessment of institutional and capacity needs, the following E&S responsibilities are confirmed to implement this ESMS. They will be subject to further refinement and change as outlined in section E.

1. Roles, responsibilities, and authority to implement the ESMS

36. The NEA shall assign and strengthen an organizational structure that defines roles, responsibilities, and authority to implement the ESMS. The ESSD and SSEMD primarily oversee the implementation of ESMS, including compliance to E&S aspects, monitoring

[6] As outlined in Section 8. Change Management

[7] Monitoring and Evaluation; Management Information System and Decision Support System.

activities and reporting on E&S aspects to the ESMS committee. In such a case, the ESSD shall coordinate with the relevant Directorates, SSEMD, subsidiary companies and projects.

37. **ESMS Committee**. The NEA will form an ESMS committee comprising the following personnel to coordinate the E&S activities within the NEA operations:

- Deputy Managing Director, Engineering Services Directorate – Chair
- Representative (at least of Director level), Generation Directorate – Member
- Representative (at least of Director level), Transmission Directorate – Member
- Representative (at least of Director level), Distribution and Consumer Services Directorate – Member
- Representative (at least of Director level), Business Development Directorate – Member
- Director, Human Resources Department – Member
- Director, Legal Department – Member
- Director, SSEMD – Member
- Director, ESSD – Member Secretary

38. The roles and responsibilities of the various authorities including the ESMS committee are presented in the Table 1 below. During different stages of the ESMS implementation, the institutional roles and responsibilities are mentioned briefly as:

a. Screening and Categorization

39. Every project being considered by NEA will be screened as per E&S screening checklist included in the ESMS for E&S impacts and categorization. For this purpose, the ESSD and SSEMD in coordination with relevant directorates and project officials undertake environmental and social screening and categorization of all projects during early stage of the project lifecycle. Alternatively, the NEA may also engage third party E&S consultant firms to carry out such screening exercises and assist in categorizing projects. The screening work will help determine “Go/No Go” status of potential projects or any potential material risks that requires additional studies. The ESSD will take into consideration the results from the screening work.

b. Impact Assessment

40. After the screening works are completed, the ESSD/SSEMD will either undertake or engage a third party with desired technical expertise and requisite experience to undertake subsequent Environmental and Social Due Diligence (ESDD) and E&S Risk Assessment studies (BES/IEE/EIA/ESIA) depending upon the project categorization. The impact assessment work includes baseline data collection, impact identification and analysis, impact prediction and evaluation, alternative analysis, mitigation and enhancement measures, stakeholder engagement among others. Based on the outcome of the detailed E&S assessment of the project, the NEA management may consider reviewing its project development decision.

c. Implementation and management

41. The ESMS will be supported by a variety of Management Plans[8] and if necessary, guidance notes, which are focused on the management or mitigation of the specific environmental and social issues or impacts generally associated with one or more phases of the project. The NEA is responsible for implementing the provisions mentioned in the ESMS. The detailed roles and responsibilities of different organizations within the NEA for ESMS implementation are presented in Table 1 below. NEA management shall ensure the availability of resources essential to implement the provisions mentioned in the ESMS. ESSD in coordination with the concerned project will be responsible for assessing the implementation of management programs.

d. Monitoring

42. The routine E&S monitoring is the primary responsibility of projects. The ESSD and SSEMD will be responsible for preparing environmental and social monitoring reports periodically in coordination with relevant directorates and projects. The ESSD in coordination with concerned project officials i) undertakes obligations on compliance with all applicable E&S safeguards requirements, ii) conduct site visits preferably together with representatives of project officials, and iii) prepare site inspection reports. ESSD can commission the E&S audit assignment to external parties depending on the project risk. The M&E system will be developed by ESSD that includes information on safeguards compliance status and activities.

e. Training and Capacity building

43. The ESSD and SSEMD, in coordination with the HRD and Training Management Department (TMD), will assess job specific training and E&S induction training needs based on the specific requirements of the ESMS and existing capacity project personnel (including the contractors and sub-contractors) to undertake the required actions and monitoring activities. The ESSD, in close collaboration with TMD, will impart training for DP's E&S requirements including that of ADB ESF 2024 and the ESMS requirements to its staff members.

[8] See annexes for details

Table 1: Roles and responsibilities of various authorities of the NEA for ESMS implementation

Authority	Roles and Responsibilities
Board of Directors	• Providing strategic guidance on environmental, social and governance performance of the NEA • Periodically review the effectiveness of implementing the ESMS and provide recommendations to improve performance • Ensure required staff and resources needed to implement ESMS
Managing Director	• Lead the NEA's overall administrative and managerial functions including E&S works • Facilitate in approving/amending the Environmental and Social Policy and ESMS from the NEA Board of Directors • Provide required resources including human and financial resources and assign roles, responsibilities, and authority to effectively implement the ESMS • Report the ESMS implementation status, performance and any problems/challenges to the Board of Directors on a periodic basis.
Relevant Directorates	• Provide necessary support in implementing the ESMS in the operations of the Directorate • The ESD to lead the ESMS committee • The DCS to lead mainly the OHS issues • Oversee E&S works within the Directorates mandated operations • Allocate staff and resources needed to implement ESMS in the operations of the Directorate • Report back to the managing Director about the status of ESMS implementation
ESMS Committee	• Periodic review of the E&S policies, procedures and management systems • Coordinate with relevant directorates, departments, subsidiary companies and projects in relation to E&S works • Oversee grievance redress mechanism and any investigation relating to breaches of E&S laws, regulations and standards and/or E&S policies, procedures and management systems • Act as GRM mechanism at central level and report back to the NEA management for further appeal • Report back to the NEA management in relation to systemic and strategic E&S issues which affect NEA's activities • Monitor and supervise projects across project lifecycle (i.e. under development, construction, operations and abandonment) to ensure that E&S matters have been adequately considered • Ensure that NEA's employees are appropriately trained in relation to E&S policies, procedures and management systems • Resolving any pertinent issues in relation to E&S matters in NEA's operations, • Oversee the implementation of ESMS of the NEA operations and conduct annual review of the ESMS document in coordination with relevant departments
ESSD	• Primary focal point for overseeing E&S risk management activities and ensuring the quality control of E&S processes within NEA operations and subsidiary companies • ESMS implementation in coordination with concerned projects of the NEA • Undertake and oversee environmental and social screening and categorization of all projects during early stage of the project lifecycle • Impact assessment including BES/IEE/EIA/ESIA and preparation of required plans such as ESMP, RAP, IPP • Involve in environmental and social safeguards monitoring during entire project lifecycle • Support in mitigation and enhancement measures • Involve in community consultation and stakeholder engagement • Support in implementation of community support programs • Establish and handle grievance redress mechanism in relation to E&S works • Establish database and management information system in relation to E&S works

Authority	Roles and Responsibilities
	• Report to the concerned directorate and ESMS committee about the implementation status of the ESMS
SSEMD	• Carry out E&S studies • Monitoring and implementation of the social safeguards and environmental mitigation measures in the projects undertaken by PMD • Prepare the environment and social monitoring reports for the projects under PMD as per the ADB requirements • Conduct public consultation, public hearing, trainings and awareness programs in the project areas • Conduct the Community Support Programmes through the Projects under PMD • Implementation of OHS measures and monitoring them • Represent the ESMS committee • Report to the PMD and ESMS committee about the implementation status of the ESMS
HRD	• Support Training Management Department in designing and imparting training and capacity development activities for employees • Oversee implementation of ESMS relevant to training and capacity development of employees • Support in organizational reform for effective implementation of the ESMS
Legal Department	• Provide legal advice and support in developing E&S policy and procedures • Provide legal advice on land acquisition and forest clearance for NEA's operations • Guide on legal matters on environmental and social safeguards including ESMS implementation
Provincial Offices	• Employee health and safety in fixing and maintaining the lines • Coordinate with DCS, ESSD and ESMS committee
Subsidiary Companies/Projects	• ESMS implementation and oversight through project ESMU • Employee health and safety, non-discrimination policy, gender issues, labor issues and all other relevant activities • Coordinate with ESMS committee and ESSD • Report the progress on implementation of ESMS to the ESMS committee and ESSD

2. List of qualified personnel

44. For the effective implementation of the ESMS, expert positions from different disciplines are needed at the NEA.

- ESMS Head
- Environment studies/impact assessment professionals
    - Environment Experts
    - Sociologist/Anthropologist
    - Economist
    - Forest Experts
    - Botanists
    - Wildlife Biologist
    - Aquatic Biodiversity Expert
    - Civil Engineer
    - GIS Expert
    - Geologist
- Environment Monitoring professionals
    - Environment experts
    - Sociologists/Anthropologist
    - Terrestrial Ecologist

- Civil Engineer
- OHS Expert

- GESI Professionals
  - Gender Expert
  - Sociologist/Anthropologist
- GRM Professionals
- IT, Statistician and MIS professionals

E. Proposed Organizational structure for ESMS implementation

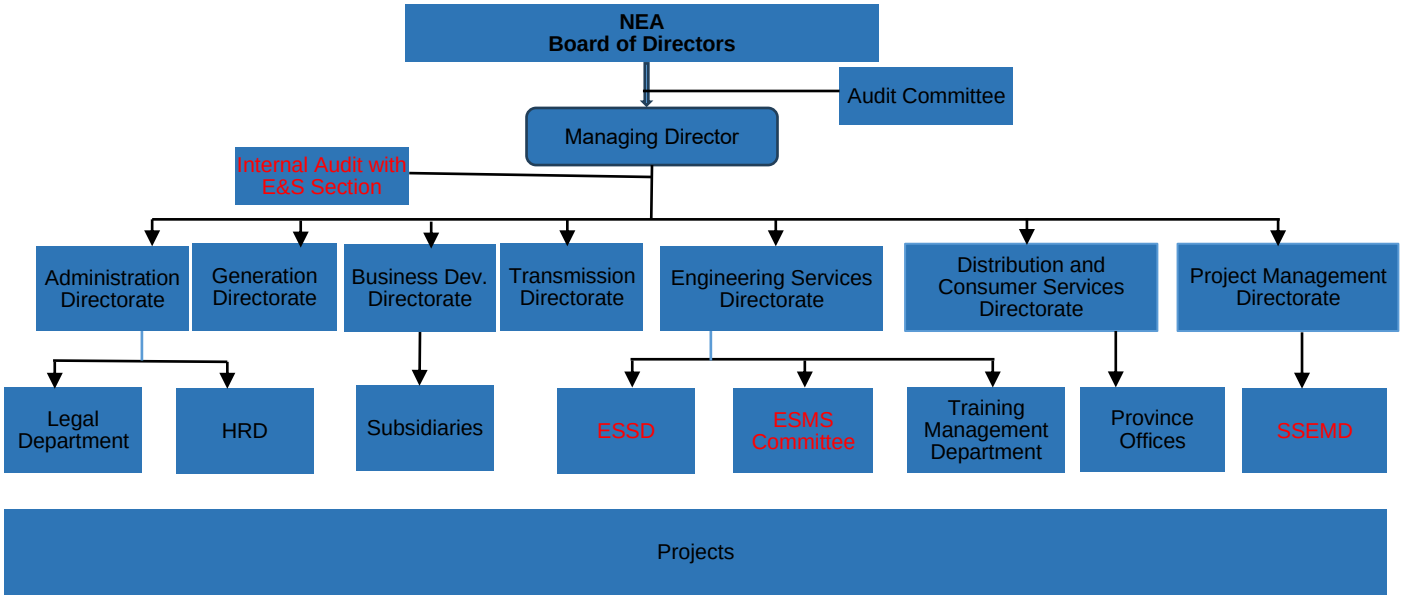


Figure 2: Organizational structure for ESMS implementation at central level

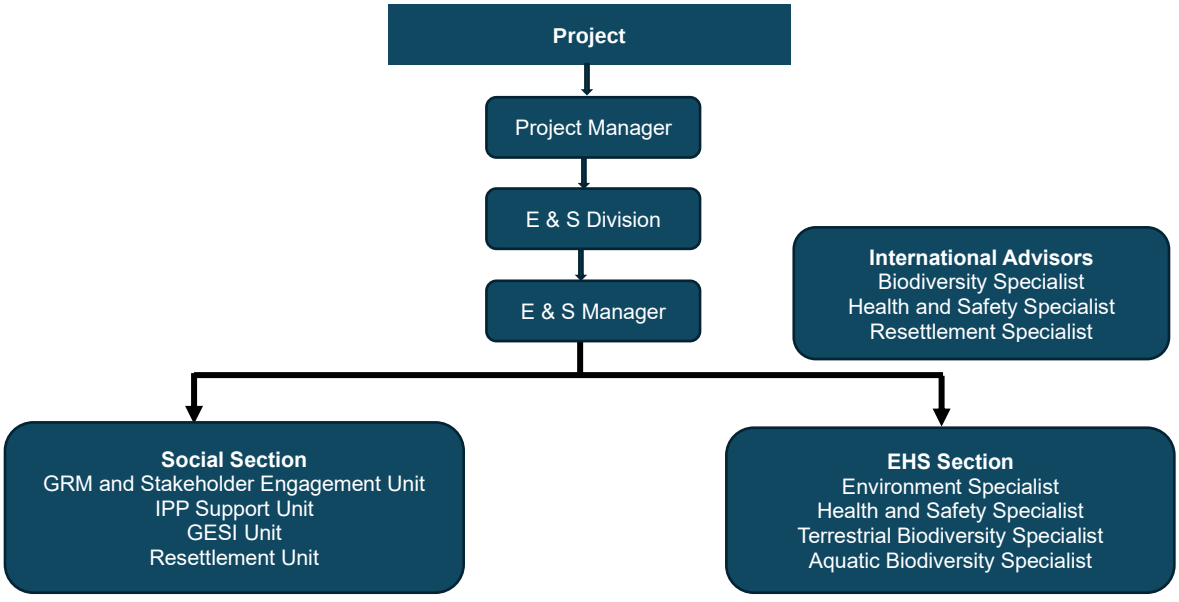


Figure 3: Organizational structure for ESMS implementation at project level

F. Organizational and Capacity Building needs

45. The NEA management will demonstrate its commitment by allocating resources devoted to E&S management and training. ESSD/SSEMD will be mandated for all E&S works within the NEA by adding additional sectoral experts in its organogram. It will serve as NEA's policy formulation, compliance monitoring, and quality control on E&S issues and can also provide technical support to other relevant NEA directorates and subsidiary companies in E&S management.

46. Strengthening capacity is a continuous process and ESSD/SSEMD staff and other concerned officials will receive additional professional training and exposure to roll out the ESMS. Appropriate GRMs at central, provincial and field level will be established that provide concerned stakeholders with an accessible, transparent, fair and effective process for raising complaints about environmental or social harms caused by NEA operations. An occupational health and safety unit will be established at the DCS and provincial offices and a safety team at project level to monitor occupational health and safety issues. The ESSD will have a dedicated Gender and Social Inclusion (GESI) Unit and work with other directorates and subsidiary companies to ensure that NEA projects take account of gender and social inclusion issues. An E&S Risk management information system will also be established, maintained and operationalized by NEA.

G. Defined E&S responsibilities

47. Actions to improve E&S are presented in Chapter 8.

IV. DUE DILIGENCE PROCESSES AND PROCEDURES

H. Process Overview

48. The type, quantity and severity of E&S issues that present a risk to NEA depend on a variety of factors, including nature of its operations, geographic context, and scale of the activity. Not all activities require the same level of E&S due diligence or management attention. The level of E&S risk management is driven by the combination of the inherent E&S risk associated with a particular activity (e.g., sector[9], location, and scale of operations). This enables the NEA to focus its E&S risk management and resource allocation commensurate with the overall E&S risk. The due diligence processes will be conducted in four steps as part of the Environment and Social Assessment (ESA).[10]

    - Project Screening & Categorization
    - Scoping
    - Baseline Study
    - Analysis and Assessment of Impact

49. In parallel to the due diligence process, stakeholder engagement activity will be conducted as detailed in Section VII. This will ensure stakeholders are engaged continuously and feedback is collected and taken into consideration during due diligence and then throughout project development and implementation.

50. Every project being considered by NEA will be screened (see Annex IV for E&S screening template) for E&S impacts and categorization.[11] Screening is a key step for an initial identification of project-related E&S risks and impacts and will be conducted at the earliest stage in every project lifecycle concurrently with the pre-feasibility study. The screening findings also guide determining the level of E&S studies and subsequent instruments required for the project.

51. Scoping, baseline study, and analysis and assessment of impacts will be conducted concurrently with the project's Feasibility Study (FS). This iterative process will ensure that E&S impacts can be avoided or minimized to the extent possible through design choices (including alternatives), while unavoidable impacts can be adequately mitigated. Specifically, the FS provides the project boundaries and footprint so that detailed E&S assessment can occur; whilst the E&S process outcomes provide a key input to the detail engineering design (DED) so that it can conform to relevant GoN and DP standards to avoid or minimize E&S impacts.

52. The NEA will follow the GoN's environmental assessment preparation and approval processes on all projects supplemented where necessary with an international standard assessment that addresses DPs requirements. In all cases, the NEA and DP teams will ensure that (both) assessment reports are consistent.

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[9] Generation, transmission, distribution, solar etc.

[10] ESA might be Environmental and Social Impact Assessment (ESIA), Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE), and Brief Environmental Study (BES)

[11] It is essential that all NEA projects be assessed for potential associated impacts that may preclude current or future international financing.

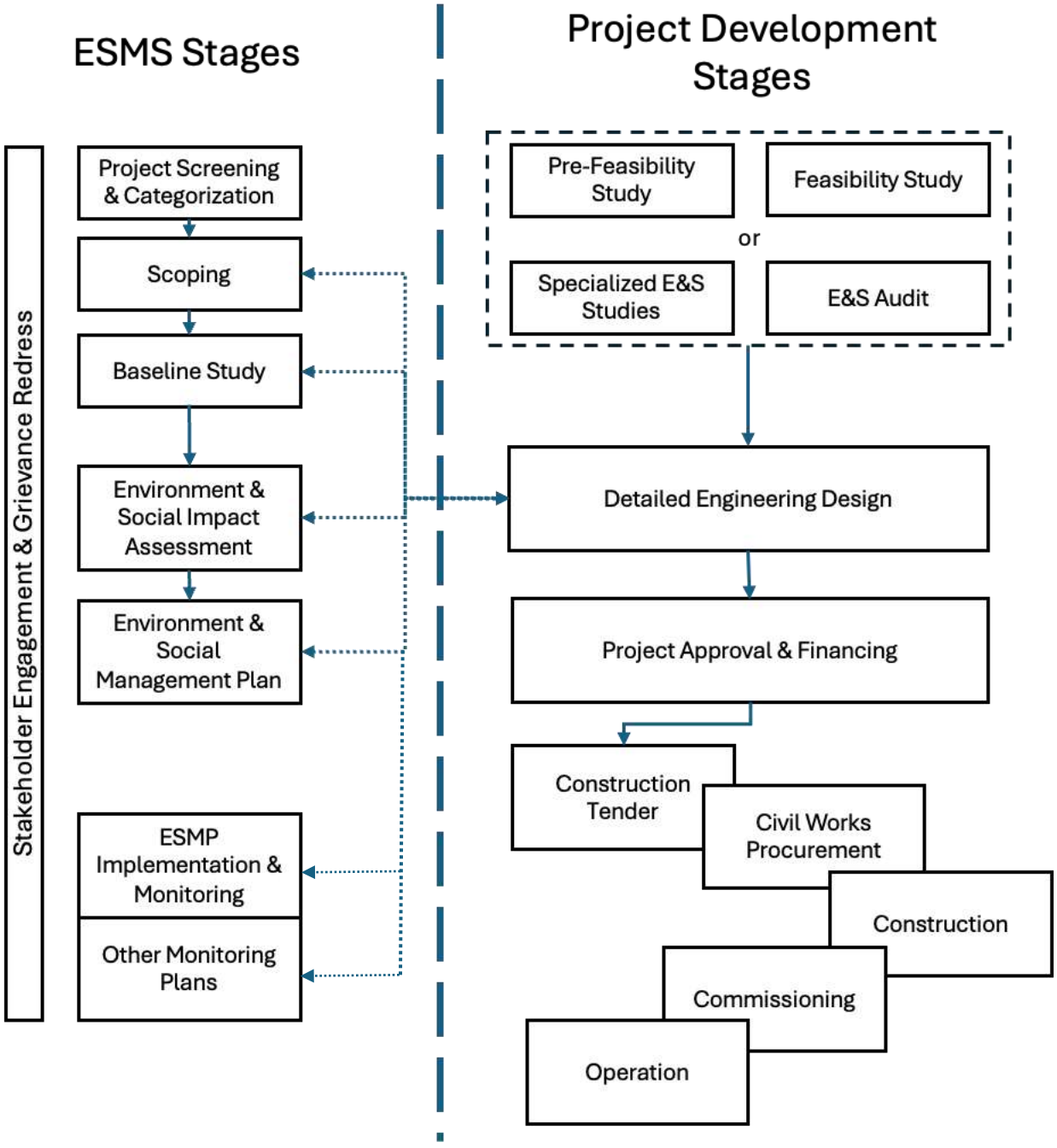

Figure 4: Environment and Social Impact Assessment & Management Process

53. Specifically, an international ESIA requires conformity with generally accepted E&S Standards.[12] These are outlined in Annex V showing key impact assessment requirements

[12] These include both the ADB and World Bank Environmental and Social Frameworks (ESFs), and the International Finance Corporation (IFC) Environmental, Social, and Corporate Governance (ESG)

and relevant management measures that must be taken. These include, but are not limited to, the followings that are beyond the requirements of GoN legislations:

- biodiversity assessment in accordance with acceptable international practice which includes critical habitat assessment, invasive alien species, and ecosystem services.
- impact of climate change on the project, and contributions of the project to greenhouse gases (GHGs) emissions and climate change.
- socio-economic surveys for social impact assessment that pay particular attention to gender equality and vulnerable groups including but not limited to Indigenous Peoples (IP).
- loss of livelihoods and welfare that do not result from land acquisition or clearance.
- physical relocation beyond payment of compensation for physical assets
- health and safety of local communities including an emergency response plan for them.
- workers hired by the third party (e.g., the subcontractor or employment agency).
- assessment of tangible/physical and intangible cultural heritage, including those that are not officially registered as cultural heritage, but which have significance to local communities.
- cross-border and global impact assessments
- cumulative impact assessment
- stakeholder engagement process
- mitigation of impacts following the best international standards and best practices for waste management, air quality and noise management, water management, biodiversity management, labour management, etc.

I. Institutional Framework

The organizational structure with roles, responsibilities, and authority to implement the ESMS is provided in Chapter 3. The ESSD, in coordination with relevant Directorates, SSEMD, subsidiary companies and projects, primarily oversees the implementation of ESMS, including compliance with E&S aspects, monitoring activities and reporting on E&S aspects to the ESMS committee.

J. Project Screening and Categorization

54. The objective of project screening and categorization is to:

- Screening of the project against a list of excluded activities as per the exclusion list[13]
- identify major E&S risks of the potential project at the earliest possible stage;
- reject projects that, based on its characteristics, would have unacceptable E&S risk level that cannot be reduced to acceptable levels;

[13] E&S exclusion list for NEA is provided in Annex II

- determine the project category based on preliminary assessment of the potential E&S risks;
- identify the type of E&S impact assessment that will be required based on the risk category; and,
- inform NEA management of resources needed to assess the project E&S risk.

55. The ESA project screening and categorization process is discrete from project engineering or technical risk management processes, which may require separate screening. All screenings (E&S, technical, engineering) should be conducted in parallel and inform each other such that the project risk can be optimized.

56. The NEA will adopt an adaptive risk management approach to E&S screening and categorization where preliminary results are revisited during the impact assessment and project implementation when more information is available, or circumstances change.

57. This process ensures compliance with GoN laws for each project. It will determine if a project is an associated facility of a DP-funded activity, requiring additional scrutiny or potentially affecting financing.

58. The screening and categorization process will consist of (i) identification of financier; (ii) consideration of associated and existing facilities; (iii) initial identification of potential risks and impacts (Site Screening); (iv) exclusion of projects with unacceptable risks and impacts; (v) categorization. The data and desktop analysis of the initial screening will be expanded and more detailed during the E&S impact assessment process.

1. Identification of Financier(s)

59. It is essential for the first step in any E&S assessment to consider the financier(s), as this will determine the level of assessment and requirements. This is even the case on GoN financed projects as they may be considered associated facilities to DP financed projects, or, in the future, subject to existing facility audits. Similarly, as far as possible, emergency works should also be subject to this ESMS to ensure that temporary fixes do not preclude anticipated DP-financed capital works.

60. In the case of multiple financiers, efforts will be made to align all the E&S assessments to meet each partners' ESS requirements, preferably through a harmonized approach.

2. Consideration of Associated and Existing Facilities

61. Associated facilities means new facilities or activities that are not funded as part of a project and could be considered: (i) directly and significantly related to the project; (ii) developed, or contemporaneously planned to be developed, with the project; and (iii) necessary for the project to be viable and would not have been developed if the project did not exist. Existing facilities are those that have already been constructed and, like associated facilities, could be considered an integral part of the project.

62. Existing facilities are, or may be at some stage in the future, subject to an E&S audit including an on-site assessment to identify past or present concerns related to E&S risks and impacts. It is essential therefore that all projects conform to GoN relevant legal and institutional frameworks to avoid future issues with DP finance. Consideration should also be given to the status or existence of required operating permits and licenses, existing plans to address

specific E&S risks and impacts identified under existing laws and, where relevant, whether DP financier requirements have been met.

63. Projects that could be considered associated facilities, whether financed by a DP or solely GoN, will be subject to full E&S assessment as per this ESMS. In case of an associated facility with cross-boundary nature, the NEA will still consider the E&S risks and impacts that may be presented by these facilities to the project within NEA's jurisdiction.

3. Types of Risk

64. Potential E&S risks and impacts will be identified by considering the following:

- ***Likely E&S Impacts.*** The likely E&S impacts of the project including its main benefits and risks, considering the scale of interventions, site characteristics, and critical environmental values. Assessing these impacts involves evaluating direct physical impacts like land acquisition, pollution, habitat loss, and safety concerns for communities and workers, as well as cumulative and indirect effects. These are considered risks and impacts "from" the Project. Each risk and impact should be assessed individually, considering their interactions, before determining the overall E&S effect of the project.
- ***Contextual Risks.*** The contextual risk which involves external events or factors that can enhance environmental and social (E&S) risks, impacting mitigation measures and overall project performance. Examples include projects in sensitive E&S settings, interaction with existing or planned activities, areas with conflict, high crime, political instability, lack of social cohesion, history of activism, illicit activities, legacy issues, and climate or natural hazards. These factors may increase adverse impacts, threaten public security, and affect project viability.
- ***Institutional Risks***. The risks associated with institutional implementation capacity, complexity and track records, are crucial for assessing a project's E&S management. Organizational, administrative, and regulatory structures impact this capacity. Early evaluation of these factors is needed to identify potential hurdles in fulfilling E&S responsibilities. Complex roles or lack of capacity pose significant risks, especially for large institutions like NEA with many divisions and regional offices. Additionally, long-term reliance on transnational partners and local distributors introduces varying levels of risk based on their capacities and NEA's oversight. These risks should be evaluated based on each project's setup.
- ***Reputational and political risks*** refer to E&S issues or trends that could expose NEA and its projects to significant reputational or political challenges. These risks can range from individual complaints to organized advocacy campaigns, including potential public perceptions, controversial project designs, past failures by NEA or the GoN, and social conflicts perceived to be linked to power projects.

65. The following aspects are required to be considered in identifying potential E&S risk and impact. This information should be documented in the screening reports and based on evidence from a wide variety of sources including public reports (especially other ESS documents), online databases, remote sensing, interviews and site visits.

- Project characteristics such as type, scale, activities, complexity and proposed technology.

- Characteristic of the proposed site, collected from site screening process.[14]
- Sensitivity of the location environment including prevailing E&S baseline conditions and the potential impacts.[15]
- Contextual events, factors or dynamics occurring in the broader environment.
- Institutional capacity and complexity to manage project-related risk and impact in a manner consistent with the international standard.
- Reputational or political risk related to the project including any possible controversies that the project or NEA may have.

4. Legal Framework

66. All projects should be assessed against the prevailing GoN policies and legislations. This should routinely include reference to the Constitution of Nepal, and the Environment Protection Act (EPA 2019) and Environment Protection Regulations (EPR 2020) in addition to other relevant laws and international treaties, agreements and conventions of which Nepal is a party. A list of relevant policies, legislations and treaties, agreements and conventions are shown in Annex III. A summary assessment of the gaps between GoN laws and policies, and those of DPs, is contained in Annex VI.

67. In the case of projects that are to be financed by DPs or may be considered, now or in the future, as associated facilities, reference to the relevant DPs prohibited investment activities list should be made to assess possible exclusion or further ramifications. A list of prohibited activities for the DPs (mainly of ADB and the World Bank) is shown in Annex VII.

K. Initial Identification of Potential E&S Risk and Impact

1. Site Screening

68. Site screening is a critical part of the E&S risk screening and categorization and will be conducted for all applicable projects. It will be undertaken by the ESSD or a designated body such as SSEMD in supervision and consultation with ESSD and follow guidance from prevailing GoN laws and policies and relevant international standards and good practice guidelines. The site screening will review administrative data (e.g., ownership status) and technical information (e.g., topography, soil, land stability, access). If critical data is missing from reports, knowledgeable NEA or other GoN staff will be consulted.

69. Specifically, site screening will collect the following information, at minimum:

- current designated land use
- distance to nearest community and public facility.
- presence of indigenous people community and customary land or forest area.
- presence of tangible/physical and intangible cultural heritage

14 Guidelines for site screening are provided in Appendix IV
15 Potential areas that need to be considered are outlined in ESS criteria in Appendix V

- distance and sensitivity of sensitive natural receptors and receptors of conservation concern
- degree of likely nuisance, health, or safety impacts on nearby communities (e.g., traffic, noise, air and water emission, hazardous materials, labour influx, etc.).
- presence of needed resources and how to get them, e.g., groundwater, surface water, fuel, gas, etc.
- presence of areas or services near to the location to properly accommodate lodging for workers (particularly during construction)
- presence of road access to mobilize workers, vehicles, and equipment safely.
- presence and capacity of institutions dealing with security issues and emergencies around the site, e.g., police, army, fire brigade, etc.

70. These criteria are qualitative (not absolute) factors to consider in determining the likely significance of potential impacts and thus informing a "yes/no" decision. Guidelines for Site Screening are provided in Annex IV.

2. Consideration of Alternatives

71. It is a fundamental requirement for all E&S assessments, including those undertaken under GoN policies, to fully identify and consider feasible alternatives to the proposed project including the without project scenario. Feasible alternatives to the project design could also include alternative project locations, technology, and other relevant project features that can avoid and/or mitigate the relevant E&S risks and impacts. For each alternative, the screening should assess potential E&S risks and impacts and, if feasible, details for further consideration.

3. Preliminary Assessment of Potential E&S Risk and Impact

72. Once site screening is complete, potential risks and impacts will be assessed for risk categorization.

- The type, location, sensitivity, and scale of a project, such as the physical considerations of the project and types of infrastructure or activities;
- The potential E&S risks and impacts of a project include factors like site type (greenfield or brownfield), biodiversity, land acquisition, Indigenous Peoples' presence, vulnerability of affected persons, emissions, waste management, climate change effects, and mitigation measures. Refer to ESS's in Annex V for details;
- The institutional capacity, commitment, experience and track record of NEA in implementing such a project, to manage the potential E&S risks and impacts in a manner consistent with the ESS's;
- The availability, cost, and nature of the technologies or methodologies proposed for mitigation and management measures, and the availability of relevant data to implement and monitor the ESS.

73. The NEA will also consider risks that may be contextually relevant to the project development or implementation, which may include:

- Applicable GoN legal, governance and institutional frameworks;

- Any social conflict or human security concerns which may be aggravated by a project's environmental or social impacts or associated mitigation measures;
- Project location in areas that are fragile or suffering from significant climate change impacts, or national boundaries where there may be conflict;
- Ecosystem vulnerability, climate change vulnerability, economic shocks, natural hazards, or presence of other factors outside the control of a project that could have a significant impact on the E&S performance;
- Information on population groups or individuals who may be considered at risk, marginalized, disadvantaged or vulnerable;
- Information relevant to host country obligations under applicable international instruments.

74. Risk screening and categorization is an ongoing process, not a one-time activity. It should be performed periodically throughout the project as new E&S data, design changes, or other significant information become available. This continuous assessment helps in determining project designs and locations and supports adaptive management by applying the mitigation hierarchy to avoid or reduce significant E&S risks and impacts. For example, NEA may need to adjust the project risk category based on its new or changing capacity, or that of its distributors. E&S risk screening can determine the required competency level for project personnel, leading to decisions on qualifications, training, and performance indicators. Initial risk screening helps NEA decide if a project should proceed or if modifications are needed to lower risks. Ongoing assessment of project risk is crucial to maintain manageable levels of project interruption.

4. Exclusion of Projects with Unacceptable Risks

75. The project risk screening will be complete once assessed against the exclusion list (Annex II) If, after considering all mitigation measures, including changes to location and design, the E&S risk remains too high, the project may be excluded based on the exclusion list.

76. It is likely that only a preliminary decision can be made to exclude a project exclusion at this initial screening phase. Subsequent impact assessments will allow a more complete review of the project E&S risks against the exclusion criteria of the project. If additional information becomes available in subsequent impact assessment or project implementation stages which indicates that an exclusion criterion triggered, screening can be revisited and categorization updated.

L. Project Categorization

77. The risk category of a project influences how its environmental and social (E&S) risks are managed, affecting the effort, budget, and resources needed. It also determines financing eligibility. Projects with high impacts on the environment or people may not be financed under some DPs' ESS criteria and must seek other financing. Consideration should then also be given to how this may affect financing of future or associated facilities.

78. All projects will be categorized based on the significance of their E&S risks and impacts and assigned one of four E&S risk classifications: *High Risk, Substantial Risk, Moderate Risk,* and *Low Risk*. This categorization applies to individual projects and sub-projects. The NEA ESSD in coordination with the project/project implementing directorate will conduct the project categorization.

79. The risk level of a project will be determined based on the risk and impact significance of the risks assessed during desk appraisal and site screening. The E&S screening scoring criteria is presented in Annex VIII. Based on these factors NEA will classify each project as follows:

1. High Risk

80. A proposed project is classified as High Risk if it is likely to have significant adverse impacts that are irreversible, diverse, or unprecedented, after considering the following:

81. The project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature or scale of the project, and/or the sensitivity of the location(s) of the project. This would consider whether the potential E&S risks and impacts associated with the project have the majority or all the following characteristics:

- long term, permanent, and/or irreversible impacts that are impossible to avoid entirely due to the nature of the project.
- high in magnitude and/or in spatial extent;
- significant adverse cumulative impacts;
- significant adverse transboundary impacts;
- a high probability of significant adverse impacts to human health and/or the environment.

82. The area likely to be affected is of high value and sensitivity and includes lands or rights of IPs and other vulnerable minorities, intensive or complex land acquisition and land use restriction, impacts on cultural heritage, or densely populated urban areas.

83. Some of the significant adverse E&S risks and impacts of the project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.

2. Substantial Risk

84. A proposed project is classified as *Substantial Risk* after considering the following factors, as applicable, in an integrated manner, together with relevant contextual factors:

85. The project may not be as complex as a *High-Risk* project. The nature and scale of its E&S risks and impacts may be smaller and the location may not be in such a highly sensitive area, but some adverse risks and impacts may be significant. This would consider whether the potential E&S risks and impacts have the majority or all the following characteristics:

- they are mostly temporary, predictable and/or reversible, and the nature of the project does not preclude the possibility of avoiding or reversing them;
- there are concerns that the adverse social impacts of the project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm, or risks to human security;
- they are medium in magnitude and/or in spatial extent;
- the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for High-Risk projects;

- there is medium to low probability of significant adverse impacts to human health and/or the environment, and there are known and reliable mechanisms available to prevent or minimize such incidents.

86. The effects of the project on areas of high value or sensitivity are expected to be lower than *High Risk* projects.

87. Mitigation and/or compensatory measures may be designed more readily and be more reliable than those of *High-Risk* projects.

3. Moderate Risk.

88. A proposed project is classified as Moderate Risk after considering the following factors, as applicable, in an integrated manner, together with relevant contextual factors:

89. The potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential E&S risks and impacts are likely to have the following characteristics:

- predictable and expected to be temporary and/or reversible;
- low in magnitude;
- site-specific, without likelihood of impacts beyond the actual footprint of a project;
- low probability of significant adverse impacts to human health and/or the environment.

90. The project's E&S risks and impacts can be easily mitigated in a predictable manner.

4. Low Risk

91. A proposed project is classified as Low Risk if its potential adverse risks to and impact on human populations and/or the environment are likely to be minimal or negligible.

92. It should be noted that the risk categorization provided in this ESMS does not reduce obligation of NEA to conduct sector-based risk categorization against Nepal regulatory requirements and identify the types of national impact assessment documents that are required. NEA will also undertake any additional risk categorization that may be required by DPs that are financing specific projects.

93. The E&S risk and categorization process identifies the types of E&S risks and impacts that are relevant to individual projects and will define the nature and scale of the E&S assessment (ESA) that needs to be conducted for the project. This ESA will be the primary tool to inform project design and for NEA decision makers and relevant DP financiers to determine whether the project is environmentally and socially sustainable. It is necessary to properly scope and plan for E&S assessment so that it can achieve these objectives.

M. Scoping

94. Impact assessment's scoping aims to deepen the understanding of the potential E&S impacts, to clearly define the activities, risks and impacts to be assessed and the project area. The scoping will develop a suitable methodology and sampling strategy for the impact assessment

that ensues and will ensure that the assessment considers inputs from stakeholders on what they consider important and that the input/issues are assessed at an appropriate level of detail. The process will also ensure that adequate and necessary technical and financial resources are planned and allocated to effectively undertake the task.

95. Proper scoping helps sharpen the subsequent impact assessment process to ensure that significant risks are adequately assessed, and that proper mitigation measures are identified. More specifically, scoping aims to identify:

- Important issues to be considered in the impact assessment process;
- Appropriate time and space boundaries of the impact assessment process;
- Information necessary to be assessed for project decision-making; and
- Significant effects and factors to be assessed in detail.

96. The scoping is an analysis compiled by the NEA ESS team using information gathered during the categorization process. It will include, but not be limited to:

97. Understanding project activities, project description and project alternatives. At this stage of the project, detailed information is available, including the project's phases, applicable technology, site design, and design alternatives for project components. The analysis of project alternatives should consider potential environmental, and community impacts to determine if the proposed design has avoided or minimized significant environmental and social effects. A thorough understanding of project activities and descriptions is necessary to identify potential interactions between the project and resources/receptors in the area of influence.

98. Land suitability. Land suitability for the project will be confirmed, especially with local/regional spatial plans. Early site screening will inform this process. Relevant government agencies should also be consulted alongside valid spatial plans.

99. Initial public consultation and stakeholder engagement. Throughout the project, stakeholders will be engaged to share plans and gather feedback on the design. Stakeholders have been identified since the screening stage, and their input will be collected continuously during all phases of the project. Their opinions will inform the scoping and impact assessment processes.[16]

100. Identify Area of Influence (AOI). The project activities that are anticipated to have immediate and ongoing impacts across spatial areas and over time is the AOI. Generally, the AOI includes the direct and indirect impact areas of a project. The impacts extend across boundaries through environmental and social factors such as those for socioeconomic conditions, air quality, biodiversity etc. Similarly, impacts are often felt beyond the project construction period, often extending well beyond the end of project duration. It is essential that scoping allow for assessment across the complete AOI.

101. Identify social vulnerabilities. Assessing local population vulnerabilities helps identify groups likely to be affected by project activities. Early identification in the project lifecycle ensures inclusive measures to mitigate impacts. Vulnerable groups may include the elderly,

[16] See requirements for Stakeholder engagement under Chapter VII

female-headed households, people with special needs or disabilities, remote indigenous communities, those dependent on natural resource-based livelihoods, individuals without secure land rights, migratory community members, and those outside social safety nets or living in disaster-prone areas. Early identification through stakeholder engagement is crucial for establishing a sufficient social baseline to assess vulnerability drivers and project impact. Further elaboration and detail will emerge during the baseline and impact assessment, which may identify additional vulnerable groups.

102. Identify sensitive receptors. The project will identify sensitive receptors, including plants, animals, and humans/communities. Sensitive receptors needing detailed analysis may include children near a polluting plant such as diesel power plant or migratory aquatic species in modified water courses. The number and extent of sensitive receptors is tentative until further identification is undertaken during baseline and impact assessment stages.

103. Identify existing social and environment issues that can be exacerbated by the project. It is critical to identify existing social issues and environmental conditions that the project might worsen. Understanding these issues helps gauge the sensitivity of impact receptors. These factors must be considered while analysing impacts and planning appropriate management strategies. The drivers and sensitivity of vulnerability largely depend on current social and environmental contexts, such as environmental degradation contributing to the vulnerability of local populations and must be assessed carefully.

104. Identify potential Valued Environmental and Social Components. Valued environmental and social components (VESC) are defined as fundamental elements of the physical, biological or socio-economic environment, including the air, water, soil, terrain, vegetation, wildlife, fish, birds and land use that may be affected by a proposed project. Early identification of these and their stressors, improves the efficiency of baseline studies and the cumulative impact assessment (CIA) process. Once a potential VESC is identified, the necessary data for the CIA process can be collected during the baseline study. This identification should consider existing or planned projects nearby that will occur within the foreseeable timeline as the proposed NEA project, possibly requiring consultation with the regional planning agency.

105. ***Define methodology for a detailed impact analysis and further studies.*** The methodology for impact analysis and baseline data collection must be clearly defined. Some impacts need deeper analysis, including modelling activities. These further studies aim to ensure reliable data is collected during the baseline stage to assess impact significance. Detailed processes are provided in Section H. Baseline data collection will focus on potential receptors of identified impacts. Additional data may also be required to support defined impact analysis methods.

106. ***Identify specialists required.*** The NEA will ensure that appropriately qualified and experienced specialists are identified and assigned to undertake the E&S assessments. NEA either will have its own experts or need to hire external specialists to ensure adequate assessment. NEA may engage internationally recognized experts for *High Risk* and *Substantial Risk* projects that are also contentious, involve serious and multidimensional issues, and generally have interrelated potential E&S risks and impacts. In all cases, experts may be engaged individually or as an advisory panel, to carry out the E&S assessment. Consideration will be given at this stage to retain such specialists during project implementation to monitor the measures identified during the E&S assessment process.

107. ***Identify financial resources required.*** The scope will also include a detailed budget for each stage of the assessments including the establishment of baseline studies and monitoring mechanisms, community engagement and participation, technical experts and necessary technical assessments (e.g. testing, remote sensing, GIS, local studies)

108. The scoping report, including ToR and costs, will be approved by the managing director of NEA. Adequate approvals and resources will be provided in a timely manner so that further action can be taken.

N. Baseline Study

109. A baseline study will be conducted to give an up-to-date and factual characteristic of the existing environment and social conditions and to identify potential impacts. This will be used to confirm the ESA plan identified in the scoping; and to establish a baseline data set for monitoring throughout assessment, construction and implementation of a project.

110. The scoping report will outline whether the baseline study will be undertaken by the ESSD or using consultants. This will depend on the categorization of the project and any additional requirements. The methodology for the baseline study also will be detailed in the scoping report and approved by the ESS team. The baseline study may also require an update to the ESA ToR developed during scoping.

111. The baseline study will include the following but not limited to:

1. Data collection plan

112. This will determine the data or information to be collected during the ESA and implementation and include how the baseline data set, sampling methodologies and monitoring timing and requirements will be established. The baseline data set and the environmental and social data sampling and parameters will be outlined in the scoping report and be commensurate with the risks identified during categorization. For high and moderate risk projects, more detailed parameters relevant to the potential E&S risk and impacts will be required including air quality monitoring, surface and groundwater sampling and analyses, bird and mammals survey, aquatic biodiversity survey, socioeconomic and demographic surveys, land acquisition and resettlement census, stakeholder interviews and focus group discussion (FGD) on socioeconomic and cultural aspects, etc. The baseline data should also take account of seasonal fluctuations, particularly those dependent on climate, such as soil erosion, sedimentation, and water resource availability. Collection of such baseline data will be considered during scoping and normally represent seasonal conditions (either wet season, dry season, or both), by considering the season/period when the project activity will be undertaken, and proportional to the level of potential impact significance. This seasonal baseline data collection may impact the overall impact assessment timeline.

2. Collect E&S baseline and social vulnerabilities & sensitive receptors data.

113. The extent of data to be collected should be identified during the scoping and the baseline data planning stages, with reference, where relevant, to prevailing international standards as outlined in Annex V. It should include, but not be limited to the following:

- areas/receptors that are potentially affected by and vulnerable to the key E&S impact caused by the project;

- quantifiable data that provides detailed characteristics of impacts, including:
    - size of the potentially affected area;
    - topographical, hydrology, geological and hydrogeological condition;
    - potential or historical natural hazard;
    - resources and ambient parameters (water quantity and quality, air quality, wind speed, light intensity, ambient noise, etc.);
    - abundance, biodiversity, and distribution of vulnerable or endangered species in the project area;
    - number and condition of physical natural heritage (including registered heritage under the government and those acknowledged by local community);
    - community attachment to certain tangible or intangible cultural heritage, the use of local language, local traditional norm and value, indigenous or customary land tenure;
    - demographic, socioeconomic, cultural, ethnic and other relevant social data, disaggregated into meaningful social groups including gender, ethnic composition, age, education, sources of livelihoods, asset ownership, infrastructure and services, social network and safety net (formal and informal), value systems, local institutions and leadership structures, etc., separating directly affected people (incl. those without land acquisition) from the rest of the local population, with a focus on vulnerable groups and assessment of the drivers of vulnerability;
    - community health and safety profile including existing health concern, disease status/common illness in the community, traffic behaviour and road incident data, security concern (including legacy conflict issue) and crime data;
    - census of existing land and non-land asset ownership, sources of livelihoods and drivers of vulnerability for people who will be physically or economically displaced (incl. non-titled landowners such as tenants, sharecroppers, agricultural labourers);
    - availability of alternative lands for potential relocation;
    - availability of additional natural resources that may provide sources of livelihoods;
    - number of people who will lose jobs, or access to livelihoods (incl. timber and nontimber forest products and aquatic resources);
    - existing infrastructure and services (including health facility) supporting the livelihood of the surrounding community, and how they support local economic activities;
    - immediate surrounding land status and use, including existing permits.
- These socioeconomic baseline data will provide the basis for the Census Survey for the resettlement action plan.

3. Identify perceived impacts.

114. Impact assessment must consider that perception of impacts may vary from one community to other or from person to person. Recording and summarizing perceived impacts shows the attitude of community or project affected people towards the project. Sometimes a negative perceived impact requires explanation to show technical information related to the

project so that the community may have more positive understanding of the project's activities. This will form part of the stakeholder consultation and engagement plan.

4. Recording stakeholders' feedback for project design.

115. Relevant stakeholders, particularly the project affected communities, must be consulted, providing adequate project information and ample opportunities to provide feedback on the project design. This may include inputs on how the proposed project design may affect their livelihood, their concern on project impacts, and expectations for project benefits. Stakeholders feedback can be obtained through individual interviews, FGD or public consultation meetings. All the consultations need to be documented properly. The results will be useful in identifying legacy issues, as well as social vulnerabilities and community sensitivity, as basis for undertaking impact assessment and consideration when planning the impact management. Stakeholders that may be consulted along the project lifecycle (within the context of E&S or beyond), e.g., community leaders and members, government institutions, non-government organizations, mass media, other DPs, other businesses/nearby project proponents, etc.

5. Issue-specific studies and modelling.

116. Specific modelling may need to be conducted to fully understand and assess project impacts. This will be dependent on the nature and scale of risk and impact and based on a methodology that is defined during the scoping process. Often these are complicated and time consuming, so they will require data to be collected as soon as possible so that the specific studies can be completed. Adequate resources (technical and financial) will also need to be allocated. The output of the specific studies will mainly be data that will be used to calculate the consequence/magnitude and/or probability of an impact. For example, air emission modelling, land acquisition and resettlement impact assessment, health impact assessment, etc. These are mainly outlined in the Annex V.

O. Environment and Social Impact Assessment

117. The Environment and Social Impact Assessment (ESIA)[17] will assess every potential significant impact thoroughly so it can either be avoided or mitigated. The impacts will be analyzed using an appropriate methodology informed by sufficient environment and social baseline data to identify the significance of pre- and post- project impacts both quantitatively and qualitatively. This will allow appropriate mitigation measures to be identified. The assessment will inform the Environmental and Social Management Plan (ESMP) that will detail how the assessed impacts will be managed. The key areas for the ESIA are as follows:

1. Impact Prediction and Mapping

118. Data from the scoping process and baseline study will be analyzed to assess potential impacts on receptors, with identified interactions further informing these evaluations. The impact assessment will use various prediction methods, including quantitative, semi-quantitative, and qualitative techniques. Impacts identified should be organized using checklists, matrices, geospatial models, maps, or other tools. This helps show how impacts

[17] ESIA is considered EIA, IEE or BES, as relevant for nationally funded projects

relate to each other. Each potential impact will be linked to the relevant project stages (pre-construction, construction, operation, or post-operation).

119. Impact assessment is not a linear process. For example, it may reveal the need for resettlement of land/assets unexpectedly, requiring further resettlement impact assessment. Similarly, significant biodiversity loss due to land clearance may necessitate additional biodiversity and critical habitat assessments. If extra studies are needed beyond initial expectations, NEA must allocate additional resources for these assessments.

120. To understand the interconnected impacts on receptors, it's crucial to recognize that one impact can amplify others. For instance, losing ecosystem services can worsen project effects on livelihoods and identity, leading to greater overall impacts. Increased local vulnerability may drive unsustainable practices, harming biodiversity. Assessing these interactions is essential to determine the scope of the impact.

121. Impact mapping, issue-specific studies, and impact assessments should thoroughly evaluate risks and impacts. For instance, in a transmission network project, soil contamination from hazardous chemicals may occur during construction and operation, while soil erosion happens during pre-construction and construction. Detailed impact mapping helps understand the impact zones and degree, time span, potential receptors, non-project activities[18] affecting project, E&S staff's mitigation capacity, and stakeholder concerns.

122. Furthermore, the interaction among identified impacts will be examined to identify any possible indirect and cumulative effects. Social impact is not only caused by social-related factors but can also result from the interplay with environmental or safety contexts, and vice versa.

2. Significance of Impacts

123. After predicting impacts, each one is detailed by its characteristics, such as nature (positive or negative) and type (direct or indirect). The potential impact's significance is then assessed, and possible mitigation and enhancement measures are evaluated.

3. Mitigation hierarchy

124. Mitigation measures should lower the impact significance to an acceptable level. All impacts, even those with 'low' significance, should be minimized. Assessing residual impact significance involves reconsidering the proposed mitigation and enhancement measures. Projects with 'high' significance after mitigation are unacceptable without credible justification.

125. Mitigation measure will be identified with considering a mitigation hierarchy as follows:

- The impact assessment will identify ways to avoid or reduce E&S risks and impacts. While site selection at the FS stage considers E&S risk screening, further scoping and assessment can inform detailed engineering design (DED) through adjustments in project sites and modifications in designs.

[18] Non-project activities refer to tasks and operations that are not directly related to a specific project. These activities are often part of an organization’s ongoing operations or general management. e. g. operational activities, administrative works, regulatory compliance, training and development etc.

- Where avoidance of impact is not possible, the ESA will identify specific actions to reduce the significance of the impact to the acceptable level. For example, if a project will surely impose landscape changes and natural resource intake for its utilities, possible measure to reduce the risk and impact through reducing the physical footprint of the project site and selecting infrastructure, equipment, and technological options that improve efficiency of required resources (e.g., energy, water, raw material, etc.). Measures to enhance positive E&S outcomes, such as use of labour-intensive technologies, etc., should also be explored.
- When residual impacts remain after all feasible mitigations, NEA will identify compensation or offset measures. This involves finding actions with positive impacts that balance out the residual risks to the project location, community, or other E&S aspects. For instance, if a project exposes certain risks to natural habitats after all feasible mitigations, compensation measures should follow objectives such as restoration, creation, enhancement, and preservation. Offsetting should be a last resort, implemented only after thorough assessment of risks and efforts to minimize impacts, alongside careful monitoring with adequate resources.

126. To reduce the impact's significance, mitigation measures should lower the probability or consequence level. These measures often only reduce probability, so careful monitoring and review are essential to ensure they remain effective. Based on strong monitoring results, adjustments to the measures or ceasing the impacting activities may be necessary. All the proposed mitigation and enhancement measures will be incorporated in a management plan with detailed management guidelines for each E&S category. These are outlined in Chapter V.

4. Cumulative Impact Assessment (CIA)

127. Cumulative impacts arise from the combined effects of an action or project with other existing, planned, or anticipated activities within a similar timeline. Identifying and managing these impacts focus on those recognized as significant by scientific or community concerns.

128. A Cumulative Impact Assessment (CIA) involves analysing how proposed developments may interact with other human activities and natural factors over time to affect chosen valuable environmental and social components (VESCs). It also proposes measures to avoid, reduce, or mitigate these cumulative impacts and risks. The main task is to determine how a project's impacts might combine with other activities and natural stressors like droughts or extreme weather events.

129. A CIA is needed when a high or substantial risk project might add to cumulative impacts on key environmental components (e.g. VESCs). It is also necessary if a project has significant or irreversible effects on VESCs affected by other developments. These developments can be existing, foreseeable, or a combination of both. CIAs should match the level of potential risks and impacts. Low and moderate risk projects may not need a detailed VESC approach and can be assessed qualitatively.

130. VESCs are environmental and social attributes that are important in assessing risks and may include:

- physical features, habitats, wildlife populations (e.g., biodiversity);
- ecosystem services

- natural processes (e.g., water and nutrient cycles, microclimate)
- social conditions (e.g., health, economics);
- cultural aspects (e.g., traditional spiritual ceremonies, cultural sites).

131. Depending on the significance of impacts on VESCs identified during the screening and scoping phases for the High and Substantial risk projects, the CIA can be conducted as a standalone study or incorporated into the project's ESA report.

5. Analysis of Alternatives

132. Project alternative analysis during scoping considered potential impacts on environment and community, and used this to understand and demonstrate if the proposed design could or would avoid or minimize significant environment and social impacts. During the ESA there needs to be further elaboration:

133. Systematically compare feasible alternatives to the proposed project site, technology, design, and operation—including the "without project" situation—in terms of their potential environmental and social impacts;

134. Assesses the alternatives' feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures.

135. For each of the alternatives, quantify the environmental and social impacts to the extent possible, and attach economic values where feasible.

136. During the ESA process, alternative designs or adjustments will be suggested based on identified impacts and mitigation strategies. These alternatives aim to reduce project risks, lower mitigation costs, and address stakeholder concerns. The goal is to choose a design that minimizes negative impacts, maximizes positive outcomes, and aligns with project goals within budget and regulatory limits.

137. Design alternatives and adjustments will be presented, with reasons and expected outcomes to the NEA ESMS committee, DP financiers, stakeholders, and the detailed design team. To ensure the ESA informs project design and site selection, it should proceed alongside the detailed engineering process. The ES Team and DED Team must maintain good communication and document efforts to reduce impacts in the ESA report, demonstrating the mitigation hierarchy's application.

6. Mitigation Measures

138. Mitigation measures refer to specific actions or strategies designed to minimize or eliminate potential negative environmental and social impacts identified during the assessment process of a proposed project, following the principle of "avoidance, minimization, and compensation" to achieve sustainable development.

139. Depending on the identified impacts, mitigation measures could include:

a. Environmental mitigation:

- Implementing environmentally friendly design features in infrastructure projects
- Utilizing sustainable construction materials
- Implementing pollution control devices
- Implementing water management plans to minimize water use or discharge
- Waste management and recycling

b. Social mitigation:

- Conducting stakeholder consultations and engagement throughout the project cycle addressing concerns and incorporating their feedback into the design.
- Providing skills training and capacity building for local communities
- Implementing relocation and compensation plans for displaced communities
- Addressing potential impacts on cultural heritage sites
- Promoting gender equality and inclusion in project design and implementation

c. Monitoring and enforcement:

- A robust monitoring plan should be established to track the implementation and effectiveness of mitigation measures, along with mechanisms to address any non-compliance.

d. Community participation:

- Local communities should be actively involved in the identification and design of mitigation measures to ensure their needs and concerns are addressed.

140. Mitigation measures should be practical, technically sound, and demonstrably effective in reducing negative impacts.

P. Design of Management and Monitoring Strategies

141. All the identified impacts will be managed through mitigation measures that have been assessed under the ESA, including monitoring of impacts, and will be further elaborated in the ESMP detailed in Chapter VI. These will be developed to reduce the impact significance, prevent an impact from escalating, and to improve the E&S performance of a project. In addition to the ESMP, impact mitigation will also occur through recommendations for project design alternatives or adjustment and establishing grievance redress mechanism for project implementation.

142. If issues or concerns arise during a project's lifecycle, the grievance redress mechanism provides a means to communicate these issues back to the project (project manager) for action. A grievance redress mechanism is in place to proactively identify and address potential impacts as well as reactively manage and resolve issues and concerns that may arise during a project's lifecycle, and an essential part of project stakeholder engagement strategy (see Chapter VII - Stakeholder Engagement).

Q. Documenting the Environment and Social Impact Assessment

143. The results of the E&S analysis and assessment, including mitigation measures will in most cases be documented in an Environment and Social Impact Assessment (ESIA). An Environment and Social Compliance Audit (ESCA) may be required to assess projects that have existing or associated facilities or when there has been a range of changes in a project during and following implementation that were unforeseen or undocumented.

1. Environment and Social Impact Assessment

144. This is a systematic recording and detailing all the potential environmental and social impacts that a proposed project might have on a specific area, including baseline conditions, predicted impacts, mitigation strategies, and stakeholder engagement, to create a comprehensive report for review and decision-making purposes. Key aspects of and ESIA include:[19]

- ***Baseline data collection*:** Information about the existing environmental and social conditions in the project area, including flora, fauna, air and water quality, demographics, cultural practices, and socio-economic factors.
- ***Impact identification and analysis*:** outlining the identified potential positive and negative impacts on the environment and social aspects due to the project, considering direct, indirect, and cumulative effects.
- ***Impact prediction and evaluation*:** Assessment of the severity, magnitude, and duration of predicted impacts, including their potential to cause significant harm to the environment and community.
- ***Mitigation measures*:** Proposals for practical strategies to avoid, minimize, or compensate for adverse impacts, including design modifications, environmental management plans, and community engagement initiatives.
- ***Stakeholder engagement*:** Outline of consultations undertaken and planned with local communities, government agencies, and other relevant stakeholders to gather input, address concerns, and build consensus throughout the assessment process.

145. This documentation is essential for a range of reasons including:

- ***Transparency and accountability*:** A well-documented ESIA provides a clear picture of the project's potential impacts, allowing for informed decision-making and public scrutiny.
- ***Decision-making support*:** The report serves as a crucial tool for project proponents, regulators, and stakeholders to evaluate the project's environmental and social viability.
- ***Compliance with regulations*:** GoN and DPs require projects to undergo an ESA process, and proper documentation ensures adherence to these legal requirements and obligations.

146. An ESCA should include: a review of a project's (existing or associated facility, or ongoing development) compliance with applicable environmental and social laws and regulations, assessment of potential environmental and social impacts from their operations, evaluation of their environmental and social management systems, stakeholder engagement practices, and

[19] See Annex IX for an outline of a standard ESIA report.

identification of areas for improvement with recommendations for corrective actions; all while considering the specific context and risks associated with the project in question.

V. E&S MANAGEMENT PLAN

A. Overview

147. The E&S assessment (ESA)[20] process identifies specific project risks and impacts. It determines applicable measures to avoid, reduce, or mitigate them to an acceptable level, together with recommendations for monitoring mechanisms. These mitigation measures and their monitoring plans will be incorporated in an Environmental and Social Management Plan (ESMP)[21] that will be a core component of ongoing project impact assessment. The ESMP is developed through the following activities:

- ***Identifying E&S impact to be managed and the establishment of mitigation & enhancement measures.*** The E&S impacts that need to be managed and its mitigation or enhancement measures are based on the result of the E&S impact assessment that have been conducted earlier.
- ***Determining performance indicators***. ESMP will also define measurable and traceable ways to assess the effectiveness of the implementation. This may include activities such as embedding the mitigation measures as part of the performance indicators of relevant parties (e.g., ES Team, NEA head unit, PP Team, etc.) or defining contract or project acceptance criteria.
- ***Developing a monitoring and evaluation plan***. A monitoring plan needs to be developed to confirm the management measures that have been implemented and to give an early indication of potential noncompliance or inconsistencies with E&S management objectives. An evaluation plan also needs to be developed to confirm that the E&S impact has been adequately mitigated.
- **Defining resources, roles, and responsibilities for impact management implementation***,* including monitoring and reporting. Resources include the budget, equipment, and personnel. The roles and responsibilities of the personnel involved need to be stated clearly so that the impact management can be implemented well.

148. Though an ESMP can have multiple formats depending on the potential magnitude of the project's impact, it should provide measures adequate to address impacts identified in the Impact assessment process. NEA will develop ESMPs that are able to cover the following:[22]

- result of impact analysis;
- required mitigation measures that must be implemented;
- measure to enhance positive impact, where possible;
- performance indicator;
- estimated timeline to implement the mitigation plan;
- monitoring and evaluation plan (with schedule);
- resources to implement the mitigation measures;

20 ESA refers to ESIA, EIA, IEE or BES
21 In national legislative context it refers Environmental Management Plan (EMP)
22 An outline of a draft ESMP is shown in Annex X

- roles and responsibilities in ESMP implementation; and
- requirement to conduct regular reviews of the ESMP to determine whether the ESMP should be amended or not, and by whom the changes (or no changes) should be made.

149. Different types of projects will have distinct impacts that need to be managed based on the magnitude of their risks. High-risk and substantial-risk projects will require additional management plans, which will be grouped within a compendium of plans under the ESMP, as per the specific E&S standards (ESS) outlined in Annex V.

B. Management of Labor Issues

150. The NEA will ensure that proposed projects can advance the social and economic well-being of project workers through employment generation and that project workers play a major role in delivering quality projects. It will strictly adhere to the Nepal Labor Act (2017) as the primary regulatory framework for workers, ensuring non-discrimination in employment and remuneration, setting minimum wage levels, and guaranteeing freedom of association and collective bargaining. It will ensure the project only employs workers with a contract and provide for public holidays, annual leave, and maternity/paternity leave. It mandates compensation for workplace injuries, disabilities, and deaths, and outlines conditions for dismissal. Similarly, the NEA will ensure strict adherence to the Child Labor Act (2001) which prohibits employing children under 14 and restricts the employment of those aged 14-18 to non-hazardous environments, excluding jobs like public transportation and construction.

151. The following will form the core of a ***labour management procedures (LMP)***:

- An ***Occupational Safety and Health (OSH) Policy*** will be developed and implemented. Infrastructure projects requiring heavy physical labour must implement proper safety measures, such as providing and enforcing the use of personal protective equipment (PPE). The policy must ensure procedures to ensure workers are aware of workplace hazards and the measures to mitigate them, and how the law will be enforced.
- ***Formal labour contracts.*** A labour management procedure will be developed that ensures that NEA and its Contractors do not use non-standard and ad-hoc labour practices such as those provided by informal labour brokers, known as *Naike*.
- ***Worker grievance redress mechanism***. The LMP will detail a robust grievance mechanism for all workers[23] to address work-related concerns, ensuring workers are informed of the mechanism and protected against reprisals.
- ***Prohibiting bonded labour and child labour practices***. The LMP will provide active measures (including contracts, training and monitoring) to ensure child labour and bonded labour practices like the *Haliya*, *Haruwa*, and *Charuwa* systems are excluded from all NEA projects, including those under contractors. The management plan will highlight risks and provide a mechanism to manage and prevent these practices.

152. The LMP will include details to manage labour issues including the identification of manpower needs, requirement for screening and recruitment processes, terms and conditions of employment, codes of ethic in the workplace (including worker behaviour), worker grievance redress mechanisms, monitoring and reporting measures. These measures may need to be adapted to specific project groups including those directly hired by NEA for the

23 Direct, contracted, primary supply and community workers, as applicable

Project, workers hired by third-party (such as the contractor, the subcontractor, the supplier, the consultant, etc.), or workers from the community if applicable for the project. Third-party partners may be required to add more detail to the management plan in their own specific contractor's LMP for their scope of work/service (e.g., due to additional risks), to be consistent with the Project LMP. In such case, the Contractor's LMP will expand as appropriate the Project LMP and need to be reviewed by the IA Sub-Team (consulting with ES Team) and approved by PP Team before they commence work. The outline of the LMP is presented in Annex XI.

C. Resource Conservation and Pollution Prevention

153. The NEA will ensure that proposed projects will follow GoN laws EPA (2019) and EPR (2020) so that E&S actions and impacts don't generate physical, biological and/or chemical pollution to air, water, and soil. Further to these laws, the ESMP will ensure the project does not consume finite resources at levels that may threaten people, the environment, and the ecosystem services the environment provides at the local, national, and global levels by providing technically and financially feasible measures to improve resource conservation and minimize resource use intensity.

154. The NEA aims to adopt a circular economy approach by focusing on resource conservation, pollution prevention, and a precautionary principle where users bear costs and polluters are responsible for rectifying environmental harm. As energy generation, transmission and distribution drive NEA's growth, it seeks a greener and more inclusive model to ensure sustainability. By enhancing resource efficiency and strengthening pollution prevention efforts, NEA seeks to reduce resource dependency and minimize environmental impact. The goal is to transition toward a resource-conscious approach that safeguards the needs of future generations. To achieve this, NEA will implement various strategic plans, including but not limited to:

- ***Resource conservation, improvement and management plan*** that will minimize the intensity of the project's resource use, and ensure efficient consumption of energy, water, soil, and raw materials, as well as other resources through the application of a circular economy and/or low carbon approaches.
- ***Waste Management Plan (WMP)*** will cover both hazardous and non-hazardous wastes. It will manage the anticipated waste produced after the conclusion of the circular economy and waste minimisation actions outlined in the resource management plan. The WMP will then cover actions that focus on reduction, recycling, reuse and recovery of waste. Residual waste will be treated, destroyed or disposed of in an environmentally sound and safe manner while controlling emissions, discharges, and residues. If there is hazardous waste (including chemicals, substances, materials etc) present, then the WMP will devote a separate section for their handling and disposal under international best practice, using licenced contractors and disposal sites. The required resource conservation and pollution prevention plans also will include specific monitoring and reporting measures developed in conjunction with DP financiers and following Government regulations.

D. Health, Safety & Security Management

155. NEA will ensure that the health, safety, and security risks associated with project activities that impact project workers and project-affected communities are avoided or minimized, particularly for those who may be disadvantaged or vulnerable. This will require plans that address worker occupational safety; as well as the health and safety of both workers and

project affected communities from sexual exploitation, abuse and harassment, and emergencies arising from project or climate induced risks and disasters. All these sub-plans will be incorporated into a project health and safety management plan (HSMP) that will be included in all ESMPs and comprise, at the minimum, the following plans:

1. Occupational Safety and Health Plan

156. Occupational safety and health (OSH) management will be established and implemented in all projects as appropriate to prevent, protect, secure and resolve for any cases of occupational accident, illness, near misses, and/or unsafe acts or conditions that may be experienced by project workers during the project activities. NEA projects will aim for zero accident through development, implementation and evaluation of strategic safety programs. This will require NEA to develop a corporate OSH policy and management system that aligns with international good practices, for OSH and safe working condition and compel OSH management measures be adopted by all staff and contractors to prevent or reduce the OSH risks to an acceptable level. Sufficient resources, risk-based approach planning, supervised implementation and performance monitoring, preventive and corrective action plan implementation, as well as continuous consultation and communication with project workers, will be implemented throughout the project cycle.

157. The NEA impact assessment team (or consultant) will define the prevention and mitigation actions for each project including OSH plans and procedures; number and capacity of OSH personnel for supervision; required trainings, personal protective equipment, safety tools etc.; implementation details including location, timing and resources required, that will be applied for all workers and work activities within the project boundary. The NEA OSH management system procedures will be utilized as reference for each project on how an unsafe condition, incident or accident should be prevented, managed, investigated for any incidents/accidents, reported and evaluated.

158. For work to be assigned to a Contractor, the project coordinating team, in coordination with the E&S Team and the relevant regional unit, will develop the TOR containing requirements for the Construction ESMP (C-ESMP) and include the OSH management requirement and prevention/mitigation action recommendations for the Contractor. This developed ToR will be utilized in the project's contractor procurement process to ensure contractors bids are aligned with and fully incorporate the needs under the NEA OSH management system.

159. Under the C-ESMP, the contractor will be required to develop an OSH plan that defines its roles and responsibilities to manage OSH aspects relevant to its scope of work and proportionate to the potential risk identified. It will include regular reviews and reporting requirements and details on how parallel operations will ensure mutual protections. A typical contractor OSH plan is outlined in Annex XII.

2. Community Health and Safety Management

160. NEA will ensure that potential impacts on community health, safety, and security are managed proportionately to the nature and scale of the project, whilst adequate measures are put in place to protect local community members from any potential incident and/or accidents that are caused by routine and non-routine activities under the NEA or the project's contractor, including from emergency situations. Management plans will also need to consider measures to prevent any misconduct when security forces are used in the safeguarding of project

workers and properties, to minimize risks to community's safety and security. This plan may also include the following:

- traffic management plan that addresses traffic and road safety risks
- sexual exploitation and abuse/sexual harassment (SEA/SH) plan.

3. Emergency Preparedness and Response Plan

161. To provide prevention and mitigation measures for emergency situations to the personnel, the property, the environment and the community, the IA sub-team (or its E&S consultant) will prepare the emergency preparedness, and response plan (EPRP) for respective projects (see Annex XIII). These may include specific emergencies such as:

- Fire emergency response plan
- Disaster preparedness and management plan for floods, dam failures, earthquakes, landslides, and Glacial Lake Outburst Floods (GLOFs) and others
- Community unrest and security management plan

4. Health and safety management plan review

162. The project HSMPs shall be reviewed and approved by ES Team, PP Team, PC Team, and PO Team and treated as part of the project ESMP prior to commencement of any project activities. For existing facilities (upgrading project), the existing HSMP, if it exists, shall be assessed and updated to reflect on the project changes including additional requirements under this ESMS, unless the existing requirements are more effective in preparing for and responding to emergencies.

5. HSMP communication

163. A detailed mechanism to communicate occurrence of incidents or emergency to the contractor/subcontractor, affected community, and government official, including how to communicate emergency evacuation (if needed), should be included in the HSMP. Such communications will include trigger of communication chains during and post incident/emergency situation from personnel within the project with NEA's PC/PO Team and ES Team, community, local government, or security agency (e.g., nearby police office, fire squad, Nepalese army) – whichever relevant.

E. Land Acquisition, Involuntary Resettlement and Access Restriction

164. The acquisition of land for NEA projects may result in various impacts associated with involuntary resettlement. This often happens when people are displaced from their homes or land to accommodate the construction of power project components, such as power plants, transmission lines, access roads, and other infrastructure required for energy-related developments. Involuntary resettlement refers to displacement that occurs as a direct result of project-related land acquisition or restriction on land use. It includes: (a) physical displacement (i.e. physical relocation, loss of residence or loss of shelter); and/or (b) economic displacement (i.e. loss of assets, or access to assets, that leads to the loss of income sources or means of livelihood). Resettlement is involuntary when affected individuals or communities do not have the right to refuse such displacement.

E1. Land Acquisition and Resettlement Policy & Principles of NEA

165. NEA aims to balance the need for infrastructure development with the protection and well-being of affected communities, fostering sustainable and equitable growth in Nepal's energy sector. It is designed to guide the process of acquiring land and addressing the resettlement of communities impacted by NEA's operations. NEA aims to ensure that land acquisition is carried out in a fair, transparent, and legally compliant manner, with due consideration given to the rights and needs of affected individuals and communities.

166. Key Objectives of NEA's Land Acquisition and Land Use Restriction (LA/LUR) Resettlement Program are:

a) Avoid economic and physical displacement or, when unavoidable, minimize such displacement by considering feasible alternative project designs and sites.
b) Mitigate unavoidable adverse social and economic risks and impacts from LA/LUR by (i) providing timely compensation for loss of assets at full replacement cost, (ii) assisting project-affected persons in their efforts to improve or at least restore their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher and (iii) Ensuring that displaced individuals, who may not have legal ownership or rights to the land they occupy, receive appropriate compensation and resettlement packages, in line with NEA's past practices and international best practices.
c) Enhance livelihood opportunities and living conditions for disadvantaged or vulnerable individuals, including providing adequate housing[24] with essential services, utilities, and secure tenure for those who are physically displaced.
d) Ensure that resettlement is designed, planned and implemented with the appropriate disclosure of information to those affected along with their consultation and informed participation.
e) Provide displaced people with access to grievance mechanisms; and as a development opportunity enabling displaced persons to benefit directly from the project, as the nature of the project may permit

167. NEA will adopt the following policy principles for each subproject that is deemed to have involuntary resettlement impacts:

1. Social Impact Assessment and Stakeholder Engagement

- Assess potential adverse effects on communities during project identification, conducting thorough analyses to minimize risks of physical and socio-economic displacement.
- Conduct social impact assessments to evaluate the effects of the project on affected communities, including vulnerable groups.

[24] Adequate housing is a fundamental component of the right to an adequate standard of living. The criteria to determine and ensure adequate housing standards are the following: adequacy, accessibility, affordability, habitability, cultural appropriateness, suitability of location, security of tenure and access to essential infrastructure and services. Also refer MoUD/DUDBC (2072). Basic construction standards related to settlement development, urban planning and building construction.

- Engage in inclusive dialogue with affected and vulnerable groups (e.g., women, indigenous peoples, disabled individuals) to ensure their active participation in the resettlement process, incorporating cultural appropriateness in the execution of resettlement activities.

2. Risk Mitigation and Planning for Resettlement

- Develop a comprehensive Resettlement and Rehabilitation Plan to ensure displaced individuals and families retain or improve their pre-project living conditions.
- Provide compensation and support timely, ensuring that compensation, resettlement, and rehabilitation provisions are in place ahead of physical or economic displacement.

3. Compensation and Livelihood Restoration

- Ensure fair and transparent compensation processes, including 'land-for-land' compensation for PAPs if available and scientific valuation of lost property to guarantee compensation at replacement value.
- Provide necessary resources for resettlement, address livelihood concerns, and minimize the adverse impacts of displacement by promoting gainful socio-economic opportunities for affected individuals, families, and communities.
- Address livelihood losses resulting from land use restrictions by allowing regulated or restored access to resources or providing alternative livelihoods.

4. Gender Equality and Vulnerable Group Considerations

- Ensure that women are fully involved in the resettlement process, with clear recognition as beneficiaries of compensation and resettlement assistance.
- Design targeted communication strategies to engage vulnerable groups, including those without legal land ownership, ensuring they receive appropriate support and compensation during project implementation.

5. Monitoring, Transparency, and Grievance Mechanism

- Implement transparent processes in land acquisition, compensation, and resettlement activities to ensure fairness and accountability.
- Establish an accessible grievance mechanism to address and resolve complaints from affected individuals.
- Set up an effective monitoring and evaluation system to track the outcomes of resettlement and compensation efforts, ensuring objectives are met and impacts are minimized.

E2. Requirements

Project Design Alternatives

168. NEA should consider feasible alternative project locations and designs to avoid or minimize land acquisition or restrictions on land use, especially where this would result in physical or economic displacement while balancing environmental, social, and financial costs and benefits, and paying particular attention to gender impacts and impacts on the poor and

vulnerable. Where this cannot occur, there will be a need for a land acquisition and resettlement action plan that may include specific measures for Project Affected Peoples (PAPs) including Indigenous people and vulnerable communities.

169. Options to avoid or minimize land acquisition include brownfield redevelopment rather than greenfield constructions of new facilities, utilizing existing infrastructure, and moving or rerouting project sites and facilities. Using the local government-owned land (planned for public facilities) is suggested to avoid impact on land owned by individual landowners. NEA will minimize the amount of land needed for the project to reduce its overall impact on communities by early planning for land acquisition that should start right from the FS stage and a full integration of land acquisition impact in the assessment of alternatives. NEA E&S offices are responsible for evaluating and identifying the land area proposed in the detailed engineering design. They should coordinate closely with local government authorities to determine the most suitable location, ensuring minimal negative impact on the surrounding community.

Resettlement Screening

170. At the early stage of the E&S assessment, the concerned NEA project's ESMU will screen for potential physical or economic displacement. The E&S team of the project will prepare a comprehensive screening checklist (Annex XXIV) to assess and identify any potential resettlement risks, ensuring that all risks are thoroughly evaluated, and mitigation strategies are planned accordingly.

Detailed Measurement Survey (DMS)

171. The screening findings will guide the process for conducting a resettlement survey and preparing the resettlement plan. If resettlement risks are identified, a Detailed Measurement Survey (DMS) will be carried out to document all losses, including assets, business operations, and access to private assets, as well as natural and cultural resources and services. This inventory will also include the measurement and enumeration of project-affected land, structures, trees, crops, and other related properties including visual evidence. The DMS will be complemented with cadastral mapping, and coordination with the district land survey office will be established to obtain cadastral maps that align with the project footprint. GIS coordinates will be assigned to all potentially impacted land parcels and assets. On-site verification of the detailed surveys of affected land will be conducted, including reviews of land use and ownership arrangements.

Census & Socioeconomic Baseline Survey

172. NEA will conduct a census and a socioeconomic baseline survey for all relevant operations to identify all Project-Affected Persons (PAPs) who will be physically or economically displaced and are eligible for compensation and/or assistance. The census shall cover the total population of PAPs and include an inventory of all losses (assets, business, access to natural or cultural resources or services, etc.). The census will document all the project-imposed restrictions on use of, or access to, land or natural resources. The assessment of the census data will address the claims of communities or groups who, for valid reasons, may not be present in the project area during the time of the census, such as seasonal resource users including those who only have use rights but who will face significant loss because of loss of access to the land.

173. A socioeconomic baseline survey will include the following at minimum:

- the current socioeconomic profile of the PAPs. The concerned project's Social Team will ensure that the profile write-up provides information affecting women as well as other vulnerable groups and will disaggregate the data by gender, caste, ethnicity, disability and income as required in the NEA Gender Equality and Social Inclusion Strategy and Operational Guidelines, 2020 (Sections 4.2.1 and 4.2.4).

- an assessment of vulnerability and the need for special arrangements to be made; and degrees, types and nature of impacts.

- data shall be disaggregated by gender and other relevant parameters. In addition, the socioeconomic baseline survey may require intra-household analyses in cases where the livelihoods of different members in a household (e.g. women and men) are affected differently.

Eligibility Criteria

174. All displaced persons or Project Affected Persons (PAPs)[25] are eligible for certain types of mitigation measures. PAPs in the context of NEA operations may be categorized as follows:

i. Persons who have formal legal rights to the land or assets, including customary and traditional rights recognized under applicable laws of GoN;

ii. Persons who do not have formal legal rights to land or assets but have a claim to such land or assets that is recognized or recognizable under applicable laws of GoN. Claims under this category can be derived from adverse possession[26] or from customary or traditional tenure arrangements and land use rights, including customary or traditional use to which E&S Standard on Indigenous Peoples applies;

iii. Persons who have neither formal legal rights nor recognized or recognizable claims to the land or assets they occupy and/or use.

iv. In projects requiring the displacement of persons, such as slum-dwellers or squatters, that are occupying land or assets without a formal title, NEA will prepare and implement a resettlement plan in compliance with this ESMS.

Establishment of Cut-off Date

[25] PAPs refer to all persons and/or communities impacted by the involuntary resettlement. The term includes all members of a household (women, men, girls, boys, including several generations in the case of extended households); the owner and employees of a business; members of an ethnic minority group; tenants; land owners and sharecroppers; informal settlers (i.e. lacking formal titles); holders of customary land rights; informal business-operators/vendors and their employees/assistants

[26] Adverse possession is a legal doctrine that allows a person to claim ownership of land or property owned by the Government after occupying it for a certain period of time without any the permission. In order to successfully claim adverse possession, the person must meet specific requirements, such as continuous use, exclusivity, and the occupation must be open and obvious to others. The Land Ordinance developed by the government has set up a time period of 10 years. This means that even if someone is not the legal owner, they can potentially gain ownership of the property if they meet these criteria.

175. In conjunction with the census, the NEA should establish a cut-off date for eligibility for compensation land and other assets. NEA can either establish a cut-off date following the completion of the census survey and inventory of losses or adhere to the provisions of the LAA. According to Clause 9 of the LAA, the cut-off date is defined as the date when the Compensation Determination Committee (CDC) issues a land acquisition notice, after which no further claims or enumeration of affected land and/or assets will be accepted. In any case, information about the cut-off date must be effectively disseminated across the project area.

Valuation, Modes of Compensation and Livelihood Restoration

176. NEA will follow the compensation determination procedures as provisioned in the Land Acquisition Act, 1977. This act lacks compensation measures for project-affected non-titled holders, including tenants, informal settlers, encroachers, and those with unformalized titles. It has not prescribed the valuation approach and the methods to compensate acquired land and assets at replacement value[27]. NEA must address these gaps to meet DP standards and align with international best practices (see Annex VI for summary of Gap Analysis Report).

177. All affected assets identified by the survey teams will be recorded and verified in the presence of the concerned persons or owners of the impacted assets. During this process, the assets to be impacted will be carefully accessed by technical experts, and measurement of such assets will be taken with full consent from asset owners to ensure scientific methodology and preciseness in computing the compensation amount. It is recommended to geo-reference assets (land, structures) using GPS for monitoring and future claims. Asset valuation will be carried out by the district-level Compensation Determination Committees (CDC). When valuing affected assets, the CDC will take account of rates in the open local market and information gathered during Detailed Measurement Survey (DMS) to ensure that compensation is at replacement value. Compensation rate for all types of losses will be prepared. The established price list for land and other assets will be used for compensation of property acquisition. During the course of project implementation, the rate will be continuously reviewed and updated on an annual basis by the CDC. See Annex XV for recommended approach of Valuation to ensure replacement for each type of losses.

178. Compensation will also include payment for housing and non-land assets to the same or higher value. This can also be in the form of replacement housing of similar or higher value at or adjacent to the displacement site, in full consultation with affected people. Often these situations provide opportunities for the project to significantly improve affected people's livelihoods. In addition to compensation for physical and non-physical assets, compensation will also include livelihood restoration and improvement and for both physical and economic displacement. This will include actions and plans to restore, to better than pre-project levels, businesses and livelihoods that are interrupted through permanent or temporarily displacement.

[27] Full replacement cost is defined as a method of valuation that provides sufficient compensation for replacing assets and transaction costs. Where functioning markets exist, the full replacement cost is the market value as established through independent and competent real estate valuation, plus transaction costs. Where functioning markets do not exist, the full replacement cost can be determined through alternative means, such as the calculation of the output value for land or productive assets, or the undepreciated value of replacement material and labor for the construction of structures or other fixed assets, plus transaction costs. In all instances where physical displacement results in the loss of shelter, the full replacement cost must at least be sufficient to enable the purchase or construction of housing in a similar condition to the housing impacted by the project.

179. Where a community's commonly held resources are affected, measures shall be implemented to allow continued access to the affected resources or to provide access to equivalent resources, also taking cultural aspects associated with such common resources into consideration where relevant. This could take the form of initiatives that enhance the productivity of the remaining resources to which the community has access and/or in-kind/cash compensation.

180. At all stages, the loss of land and livelihoods through unavoidable impacts should be utilized to improve affected people's situations and improve living standards. While these situations are often disruptive and traumatic for affected people, they can be opportunities to alleviate poverty and achieve development objectives that would otherwise only be realized by project beneficiaries who are often well outside the project impact area. When possible, NEA, in cooperation with the relevant authority, will also improve social and public infrastructure with the aim of contributing to the sustainable and inclusive socioeconomic development of the affected and host communities

181. In some cases, the use or restriction of access to land might occur only for a temporary period of time. In such cases, priority shall be given to vacant land and to voluntary land transactions from PAPs (such as renting or leasing). If temporary economic or physical resettlement is unavoidable, NEA shall compensate PAPs either in-kind or in cash so that they can maintain their living standards and/or livelihoods during the period of land use restriction.

182. In cases where only part of the land or asset is acquired and the residual land is not residentially or economically viable, NEA shall offer the option to acquire the full plot. If there is a dispute in relation to the residential or economic viability of the remaining plot of land, NEA should engage an independent third-party valuator to assess it.

183. Any community facilities, utilities or public amenities impacted will be replaced to provide a similar or better level of service. The replacement should be carried out based on consultation with the project-affected community and relevant government stakeholders.

Land Acquisition and Resettlement Action Plan (LARAP)

184. A Land Acquisition and Resettlement Action Plan (LARAP) or equivalent (see Annex XVI for an outline) needs to be developed and implemented in line with this ESMS and/ or relevant standards of the financing DP including a plan for adaptive management, as needed. In case of economic displacement, a Livelihood Restoration Plan (LRP) or equivalent will be developed to mitigate adverse economic impacts on displaced persons and/or communities. The focus of the LRP will be to improve, or at least restore, livelihoods of affected persons. The LRP can be devised as a standalone document or incorporated in the LARAP in cases where the project leads to both physical and economic displacement. The LARAP & LRP or equivalent will establish the entitlements of affected persons and/or communities (Refer Annex XVII for sample Entitlement Matrix) agreed upon with the affected community/persons or their representatives and ensure these are provided in a transparent, consistent, and equitable manner. Affected communities/households who may not be physically affected but who are economically displaced (defined as loss of assets and/or means of livelihood) will be considered in the Livelihood Restoration Plan or equivalent. They will be provided with targeted assistance and transitional support to at least restore their livelihoods. The transitional support can consist of cash, job opportunities, training, legal assistance or other forms of support. The modes of support will be determined in consultation with the PAPs.

Voluntary Land Donation

185. Voluntary land donation (for instance in the case of 33 KV pole location) is an allowed activity but subject to significant scrutiny and all discussions must be fully documented. Lands donors must be made fully aware that there is an option of compensation for their land and that they have the right not to donate the land. The amount of land being donated should be minor and will not significantly affect the donor's remaining land that required to maintain the donor's livelihood at current levels. No relocation or physical displacement is involved, and the donor will be expected to benefit directly from the project. Community or collective land donation can only occur with the consent of all individuals using or occupying the land. In all cases, proposals, discussions and agreements should be fully recorded and confirmed in writing and will be subject to independent audit and confirmation.

Grievance Mechanism

186. NEA will establish a grievance mechanism consistent with the requirements set out in Chapter VII Stakeholder engagement, as early as possible. The mechanism shall be socially appropriate and readily accessible, regardless of gender or any other socioeconomic characteristics. The mechanism should promptly address concerns and grievances related to the involuntary resettlement process (such as entitlements, access to information, compensation or relocation) raised by PAPs, host communities or others. Additionally, the mechanism will include a recourse procedure to resolve any disputes in an impartial manner. The mechanism should not impede access to the country's judicial or administrative remedies.

Stakeholder Engagement and Disclosure

187. The ESMU of the concerned project of NEA will identify and meaningfully engage in a transparent manner with all PAPs, both men and women, host communities and other relevant stakeholders regularly throughout resettlement planning, implementation, monitoring and evaluation. In that respect, NEA should comply with the requirements for stakeholder engagement and disclosure of information outlined in the Chapter VII Stakeholder engagement of this ESMS and document the process.

188. NEA will inform PAPs about their options and rights pertaining to resettlement. NEA will disclose all relevant information (including LARAP/LRP) in a timely and context-specific manner, in an accessible place, in a form and language(s) understandable to all PAPs. Special attention should be taken in cases of illiteracy or where education differs according to age, gender or economic status. Compensation and resettlement understandings reached by NEA with affected parties should be reflected in written agreements.

189. NEA shall give special attention to vulnerable groups who may be disproportionately affected by the resettlement process and implement specific provisions for consultations involving IPs. If IPs customary lands are impacted and required to obtain consent, NEA shall obtain FPIC. The NEA Gender Equality and Social Inclusion Strategy and Operational Guidelines, 2020 requires that notifications containing the project information will be disseminated in local language, easy to understand and uses locally appropriate media (e.g. radio, posters, wall paintings, pamphlets as well as in group interactions (Section 4.2.6).

Vulnerable Groups and Gender Dimensions

190. During the resettlement consultation, planning and implementation process, NEA will give special consideration to individuals and groups that are vulnerable, marginalized, systematically discriminated against or excluded on the basis of their socioeconomic characteristics such as Dalits. The vulnerability assessment shall be context-specific and conducted as a part of ESA studies.

191. NEA will pay special attention to the specific gender dimensions of involuntary resettlement, especially regarding stakeholder engagement, the census, valuations, payment of compensation and livelihood restoration. NEA will put in place specific measures as necessary so that women's perspectives and interests are considered in all aspects of resettlement planning and implementation. NEA should consider feasible measures for women to gain security of tenure and receive cash or in-kind compensation on equal terms as men.

192. Where Indigenous Peoples may potentially be physically or economically displaced, avoidance and minimization of impacts shall be given priority and NEA should demonstrate best efforts have been applied to exploring alternative project designs to avoid or minimize impacts to Indigenous Peoples. If avoidance is impossible, the resettlement planning documents should be devised in coordination with, or as part of the Indigenous Peoples plan as defined in Section G, IPs of this ESMS.

193. NEA through its project's ESMU will ensure that the resettlement plan includes a separate chapter focused on women, poor and the excluded, outlining the specific constraints faced by them and the specific support required to address these as required in the NEA Gender Equality and Social Inclusion Strategy and Operational Guidelines, 2020 (Section 4.2.6)

Monitoring and Evaluation

194. NEA will set up a monitoring system (i.e. resources, staff, and procedures) commensurate to the scale of the resettlement and the risks involved. NEA will produce periodic monitoring reports as part of its reporting requirements, including information about grievances and how they are redressed. In the case of significant involuntary resettlement impacts, NEA will be required to engage an external party to conduct monitoring or a mid-term resettlement review/audit to comply DP requirements. Monitoring will assess, amongst others, adequacy of entitlements and assistance to offset all losses and impacts.

195. The Gender Equality and Social Inclusion Strategy and Operational Guidelines, 2020 (Section 4.3.4) prescribe the following as part of monitoring as relevant to managing impacts on involuntary resettlement: (i) include on regular basis indicators of gender equality and social inclusion; (ii) disaggregate household data on benefits by gender and type of vulnerability; and (iii) verify the implementation of gender equality and social inclusion provisions in the Conditions of Contract for contractors and other service providers. In evaluation, it prescribes the examination of the following aspects: (i) gender equality and social inclusion aspects in studies and field investigations; (ii) consultations and mechanisms to reach the women and excluded groups; (iii) design and implementation of training and community development programs; (iv) project-generated local employment; and (iv) women's and excluded communities' representation in local committees.

196. NEA will prepare an audit report upon completion of all resettlement activities as detailed in their respective plans. The report should assess whether livelihoods and living standards have been improved or at least restored and, as necessary, will propose corrective actions to

meet objectives not yet achieved. Where resettlement impacts are significant, an external party should l carry out the final evaluation as necessary. NEA will put in place the supplementary actions identified and/or deemed necessary during resettlement monitoring and/or the final audit, in line with the provisions listed in this ESMS.

Institutional Arrangements

197. The ESMU of NEA's project will include a land acquisition subunit staffed with qualified experts such as social development and resettlement specialists, gender experts, Indigenous Peoples (IP) specialists, and social mobilizers, as needed. The ESMU will be responsible for conducting resettlement screening, social impact assessments, detailed measurement surveys (DMS), censuses, and socioeconomic surveys of the Project-Affected Persons (PAPs) and to prepare Land Acquisition and Resettlement Action Plan (LARAP) and/or Livelihood Restoration Plan (LRP) or equivalent as necessary. Additionally, the ESMU will oversee resettlement planning, implementation, and compliance monitoring to ensure proper management of resettlement activities.

198. The land acquisition subunit, led by an experienced administrative officer and supported by a resettlement expert, will be tasked with acquiring various types of land—whether private, Guthi, forest, or public/government lands—required for the project, either permanently or temporarily.

199. The NEA ESSD/SSEMD will function as the oversight institution, ensuring the quality and effectiveness of the resettlement instruments developed by the project ESMU. This structure will ensure that the land acquisition and resettlement processes are carried out efficiently and in line with this ESMS and in compliance with DP's requirements.

F. Biodiversity and Sustainable Natural Resources Management

200. Biodiversity impacts are often project and location specific and may not occur in every project. The assessment and management of biodiversity impacts are one of main gaps between international standards and GoN regulations, particularly on its screening process. Based on the national regulations, the project's biodiversity screening tends to be focused on status of the area determined by the government (protected or not), whilst based on international standard, comprehensive criteria beyond the formal status of area shall be considered, such as indication and/or presence of critical habitat.

201. Screening of biodiversity impact is aimed to avoid action with potential harmful (and particularly with irreversible) consequences to the biodiversity aspect. This is aligned with the precautionary approach applied for biodiversity management.

202. Any potential impact on biodiversity will be assessed in the impact assessment process of the project. Biodiversity impact assessment shall cover assessment on ecosystems affected, species affected, ecosystem services affected, protection status, baseline threats (e.g., habitat loss, degradation, fragmentation), and should include analysis on invasive alien species, nutrient loading, overexploitation, etc.

203. The NEA will undertake the following assessment and management for its relevant operations:

- Assessment of the adequacy of released flow to maintain the aquatic biodiversity downstream of a dam.
- Assessment of natural, modified, and critical habitats outside of designated protected areas.
- Assessment of the potential for introduction of alien invasive species and their management during project works and operations.
- Assessment of associated up-stream impacts or primary suppliers, who may be from regions identified as having degraded or critical habitats.
- Adherence to international conventions for which GoN is a party.

204. Biodiversity impact assessment will give comprehensive information related to the impact and risk, mitigation effort that need to be planned, and to ensure to avoid or minimize the impact as far as possible. In managing the risk and impact on biodiversity, the following mitigation hierarchy shall be applied: avoid – minimize – restore/compensate – offset, from most desirable to least preferred strategy. At certain condition identified in impact assessment (screening and/or scoping stage) an additional or more comprehensive studies may be required, for example, Critical Habitat Assessment (CHA) may be required if during the assessment, potential impact to area fitting the criteria of critical habitat is identified.

205. Where significant risks and adverse impacts on biodiversity have been identified from the impact assessment stage, a Biodiversity Management Plan (BMP) will be developed and implemented. Depending on the nature and scale of project risks and impacts, the BMP may be presented as a separate document that is still part of the Environmental and Social Management Plan (ESMP for the project). A BMP will provide details by which impact avoidance, mitigation, and offsetting measures that have been identified during the assessment process and/or required by permits and licenses shall be implemented.

206. Biodiversity offset will be considered as a last resort of management action. Offset will be considered only if significant residual adverse impacts remain after all technically and financially feasible avoidance, minimization, and restoration measures have been considered. See the Biodiversity Management Guidelines for more information.

207. A more detailed description on management of biodiversity impact, including offset principles and guidance, is provided in the Biodiversity Management Plan (Annex XVIII).

G. Indigenous Peoples Plans

208. The Constitution of Nepal protects and promotes the rights of its diverse ethnic, linguistic, and cultural groups, ensuring non-discrimination and safeguarding their language, culture, and participation in state affairs. The constitution policy has also made a provision for the adoption of the principle of prior informed consent in any development work. It established the Indigenous Nationalities Commission and aligned with international standards by adopting the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and ratifying the ILO Indigenous and Tribal Peoples Convention No. 169. This convention includes provisions against coercion, protection of cultural and environmental values, consultation on legislative measures, respect for self-determined development priorities, legal safeguards, land rights, informed consent for relocation, and compensation for any losses due to relocation.

209. The purpose of this ESMS applies to the groups of IPs as defined by the National Foundation for Development of Indigenous Nationalities (NFDIN) Act (2002) and who meet the following four criteria of (i) self-identification (ii) historical continuity; (iii) territorial attachment; and (iv) distinct culture, noting however that the principles may be applied to the communities that are recognized under the Nepal regulations, when consistent with the defined criteria.

210. NEA's operations might potentially impact IPs. IPs have unique characteristics that require special handling and assistance. The NEA will pay particular attention to IPs to prevent its activities from adversely impacting IPs given their cultural and socio-economic characteristics that may differentiate their needs in receiving resettlement assistance from other beneficiary groups. Special measures should be taken to ensure that the aspirations of IPs are heard and explicitly considered in the planning and implementation of activities. Decision-making should include broader IPs members and not be limited to their leaders.

211. If as part of the baseline study, an IPs is identified to be present where the project is implemented, meaningful consultations should be conducted with them, without regard to the nature of impact. This includes informing them of the project as well as associated risks and benefits, seeking their input and using them in the project design, and respecting their rights, traditions, and cultural practices. Their perspectives and concerns should be considered throughout the project's lifecycle. When identified, language barriers should be taken seriously before starting any consultation with IPs to ensure that the information is well understood.

212. To avoid and minimize impact on IPs communities, NEA will perform thorough impact assessments, including social, cultural, and environmental dimensions, specifically focusing on affected IPs. These assessments will identify potential project impacts and risks to indigenous people's communities, their lands, resources, livelihoods, and cultural heritage, as well as opportunities to benefit them in a culturally appropriate manner. Understanding these impacts and potential benefits in advance enables appropriate measures to be taken to avoid or mitigate them and enhance project benefits. Where feasible, design adjustments should be made to avoid or minimize the project impact on IPs.

213. Where the project causes a loss of IPs customary lands (even if they are officially registered as private or government owned lands); their physical relocation or significant impacts on their cultural heritages, the project will establish and maintain a FPIC of affected IPs community, and document the processes through which the FPIC is achieved, conditions under which FPIC is achieved, and ongoing consultation processes to maintain FPIC. The documentation of engagement strategy according to DPs may take the form of an Indigenous Peoples Plan (IPP). The FPIC will be achieved before the activity commences, which affects the IPs community that is present. Guidelines to conduct FPIC and how to prepare an IPP are provided in Annex XIX.

H. Cultural Heritage

214. The NEA abides by the Nepal Constitution which outlines the need to carry out studies, research works, excavation and dissemination for the protection, promotion and development of ancient, archaeological and cultural heritages. Furthermore, the EPA (2019) mandates that project proponents maintain an inventory of cultural heritage and declare environmental protection areas including the need to prepare and maintain an inventory of objects, places,

plants and animals of cultural heritage importance, including those listed in the World Heritage list.[28]

215. NEA will make all possible efforts to avoid heritage sites, archaeological sites, historically significant places, and monuments by exploring all possible design changes, including altering the project size and capacity. When avoidance of cultural and religious heritage sites becomes impossible, NEA will consult with Ips and local communities to assess the impacts on both tangible and intangible cultural heritage. Possible mitigation measures will be included in the E&S assessment reports.

216. NEA will, based on the assessment, develop a cultural heritage plan (CHP) where relevant (see Annex XX).[29] This will inform concerned government agencies and stakeholders of chance finds (as required by law), and ensure that there is a consistent approach to cultural heritage protection and the process involved during chance finds, community feedback or the presence of intangible cultural heritage. This will also be linked with a comprehensive and meaningful participation and consultation program with stakeholders throughout the project cycle.

I. Climate Change

217. Climate change is an important consideration when managing risks and impacts on the vulnerable and IPs and on project worker and community health and safety. The standard requires borrowers and/or clients to undertake project-level climate risk assessment (CRA) and implement adaptation measures where relevant. Under this standard, greenhouse gas (GHG) emission monitoring is an ongoing requirement if a project emits GHG over a certain monitoring and reporting threshold. The NEA will include climate risk and GHG emissions assessment in its ESIA processes (using a CRA[30]). Plans for monitoring and mitigating climate impacts and GHG emissions through construction and into operation will, if relevant, be documented in a climate risk monitoring and management plan (see Annex XXI).

J. Other Possible Impacts for Project-Specific Case

218. The impact assessment process may also result in the following list of possible impacts for an NEA project that will need to be managed and included in the project's ESMP. Depending on the significance of the impacts, the ESMP may require separate, standalone management plans for significant impacts, in which additional impact assessment, expertise and resources are required. Guidelines to address these impacts are outlined in the ESMS Management Guidelines document.

- Biodiversity;
- Air Quality & Emission;

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[28] Nepal is the signatory to the Convention for the Protection of the World Cultural and Heritage and hosts 10 world heritage UNESCO sites.

[29] NEA may, in consultation with DPs, appropriate experts, and project-affected persons, determine that disclosure of information regarding cultural heritage could compromise or jeopardize the safety or integrity of the cultural heritage either through unwanted public visiting, the risk of looting, or clandestine excavation, or whether the simple fact or the manner of its disclosure might violate a community's traditional intellectual property rights. In these cases, management plans will remain confidential.

30 An outline of a CRA is included in Annex XXI

- Noise & Vibration;
- Water Quality;
- Land Clearing, Erosion Control & Run-off Control;
- Hazardous Waste;
- Non-Hazardous Waste;
- Water Use;
- Energy Use; and
- Cultural Heritage Management and Chance Find Procedure.

K. Implementing the ESMP

219. The ESMP and other impact-specific management plans will be developed as part of the impact assessment process by the impact assessment (IA) sub-team with the participation of the project construction (PC) and project operation (PO) teams.

1. Development Process

220. Development of the ESMP may involve support from a third-party E&S consultant, contracted via the E&S unit which will be determined on the project risk category, the results of impact analysis and the assessment process. The TOR specifying requirements for relevant E&S management plans will be prepared by the IA sub-team.[31] The ToR for developing E&S management plans should define the outline and components of the ESMP as reported in the ESIA or scoping and baseline reports[32].

221. The contractor hired by NEA to execute the project will have to develop its own contractor's ESMP (C-ESMP) based on the project E&S management plans prepared by NEA. The C-ESMP will focus on the E&S aspects that concern the contractors' own activities and provide more details on how the outcome can be achieved, the mitigation measures to be applied and the resources the contractor would provide. The C-ESMP may include thematic management plans such as hazardous material management plan, OHS management plan for contractor's scope, etc., for risks that are assessed to be significant in the project's ESMP. The contractor may use its own E&S consultant to develop the C-ESMP. The C-ESMP needs to be approved by NEA's ESS unit, based on the review and validation from the IA sub-team and ES team.

222. In the tender process, bidders will be asked to state that they will assemble a team that includes adequate E&S expertise, such as an Environmental Specialist, Social Development Specialist, OHS Manager, Human Resource (HR) officer, and Public Relation (PR) officer/Community Liaison Officer, to lead and monitor implementation of the C-ESMP. The contractor's team will report the implementation of the C-ESMP to NEA ESS unit executing the project. PC/PO Team, and ES team, the executing NEA Main Unit will collectively review the implementation of the C-ESMP.

223. Executing NEA ESS Unit will also conduct direct verification audit on the C-ESMP to verify its compliance with the project's ESMP. Coordination and verification of audit by PC/PO Team

31 Draft TOR for preparing the ESMP are in Annex X.
32 ESMP can also be developed and finalized as outcome of the E&S assessment (ESIA, EIA etc.)

and ES Team can be conducted daily, weekly, biweekly, or monthly depending on the overall project period and risk levels.

224. IA sub-team will receive training regarding the ESMP and management guidelines and will later develop and/or guide the development of ESMP and the approach to verify criteria of success of ESMP implementation (by both NEA's and Contractor's), as well as ways to improve or remedy the actual implementation of both ESMPs. Basic capacity building (training) that is needed for IA sub-team are provided in Chapter VIII.

2. Implementation Plan

225. A detailed implementation plan will be developed that integrates critical timelines and milestones, including monitoring, re-assessment and agreed deliverables, into one plan. This will form the basis for the ESMP monitoring program to be developed. The implementation plan will also include a detailed cost, availability of resources, and the need for capacity building and training.

3. Integration into the Procurement Process

226. The ESMP will be integrated into the project's engineering designs, bidding criteria, and contractor contracts. NEA's ESMP requirements should be included in the tender documents' Request for Proposal (RFP) to guide bidders in choosing appropriate methodologies and estimating costs. The RFP will clearly outline the E&S requirements agreed upon by NEA for contractor procurement.

227. Required resources and technical capacity to achieve expected outcomes as per relevant E&S management plans will be included as qualification requirements in the selection process. The tender documents will specify items required in the contractors' proposals that allow NEA to assess their qualification to achieve the outcomes in project ESMP. Some items to be included are the following:

- List of proposed E&S management strategies and implementation plan (MSIP) and examples of MSIP from past projects. A full MSIP will be developed by the selected contractor and include the roles and responsibilities of its personnel;
- Budget proposal in Bill of Quantity (BoQ) for the unit cost and quantities of mitigation actions, which may be presented in the form of provisional sum where the exact unit cost and/or quantity of mitigation measures are hard to estimate;
- Detailed resources for key E&S management and their demonstrated capability for handling the identified E&S risk and impact;
- Commitment to support or carry out and report the implementation of mitigation measures as presented in the C-ESMP in full response to the project ESMP; and
- Commitment to be transparent and cooperative with any monitoring, supervision or evaluation activity that is conducted by NEA or its designated entity.

4. Integration in the Tender Document and Construction Contract

a. Contractor RFP Development

- Ensure that the RFP has clearly defined the E&S requirements, technical specifications from relevant E&S management plans, required skill and experience in managing their implementation, Contractor's ESMP monitoring and reporting requirements, and relevant provisions regulating the contractor/supply chain responsibility.
- Identification of any gaps, inconsistencies or areas of concern that could later be addressed through additional provisions in the "particular conditions of contract".

b. Review of Draft of Tender Document (prior to distribution to bidders).

- Review contract conditions included in tender documents to:
    - Ensure that the relevant E&S management plans are incorporated, and mitigation plans adequately planned and budgeted in the contract.
    - Ensure that a full implementation of the acceptable Contractor's ESMP forms part of and is explicitly referred to in the tender documents.
    - Identify labour-relevant provisions (workers, camps, child and forced labour, safety, grievance redress, etc.) for which falls under the contractor's responsibility, as well as identification of gaps, inconsistencies or areas of concern that could be addressed through additional provisions in the "particular conditions of contract" and/or technical specifications in reference to the labour management strategy/plan.
    - Include a requirement that all workers sign 'Codes of Conduct' governing behaviour and identifying sanctions.
    - Clearly identify that relevant E&S (including labour, health, safety and security) training programs, implementing the Codes of Conduct, etc. will be undertaken (Contractor may use external providers)
    - Clarify the contractor's responsibility to manage H&S risks to local communities that directly result from its operation
- Ensure key personnel proposed for the tasks includes competent E&S personnel, e.g., OHS manager, supervisor, and field staff for construction; Human Resource Officer and staff, Public Relation/Community Liaison Officer
- Ensure the Particular Conditions of Contract clearly states that failure to meet the E&S requirements during completion of a milestone may result in the withholding of payment for that milestone until full compliance is achieved.
- Include that the Particular Conditions of Contract specify E&S reporting requirement of the contractor to NEA, i.e., frequency (monthly, bi-monthly, etc.), line of reporting of the contractor (e.g., to OHS Team of Main Unit, Asset Team of Main Unit, etc.), and format of reporting (hardcopy, email, etc.).
- Ensure tender documents clarify the responsibilities of the contractor to prepare and adhere to the relevant E&S management plans and project E&S commitments and that no civil works will commence until the Contractor's Stage of Bidding Process Actions by

PC/PO Team ESMP has been approved by the Main Unit in-charge of management of the project or, if applicable, the supervision engineer.

- Ensure that the tender documents detail how the contractor and supervision engineer will be required to monitor and report on the impacts on the local community, issues related to increasing presence of non-local workers and workers' camps.
- Propose Key Performance Indicators (KPIs) for Contract Management, reflecting issues and risks specific to the contract and the monitoring plan.

c. ESMP in bid evaluation

- Ensure that all evaluators are familiar with the E&S requirements of the project, so they are all able to evaluate them consistently.
- Review and verify that bids submitted by the bidders respond to requirements about relevant E&S management plans/actions under Contractor's responsibility in sufficient details, including regard to engagement with the local community, clear lines of communication, consistent record keeping, capacity to manage H&S risks.

d. ESMP after contract signing

- Prior to commencing works, the contractor submits the full contractor's ESMP (C-ESMP) and potential labour data, which includes specific management plans relevant to its service scope including for: (i) work activities; (ii) labour management; (iii) occupational health and safety management; (iv) environmental management; (v) social management; (vi) community health safety and security management; and (vii) emergency response and preparedness.
- Main Unit (can be also attended by IA Sub-Team, ES Team, PP Team, and PC Team) in-charge of management of the project and the supervision engineer conduct a kick-off meeting with the selected contractor to provide information on types of work, work description, potential hazard, risk mitigation and E&S impact within the project. The submitted C-ESMP will be confirmed during this meeting. In case the C-ESMP submitted by the contractor does not meet the E&S requirement, the Contractor will be given time to modify the C-ESMP to meet all relevant requirements. C-ESMP will be finalized and approved by the Main Unit in-charge of management of the project prior to mobilization or any works start
- Set up a process for contract management that plans for regular meetings of the parties to monitor the contractor's performance in all areas.
- Ensure the C-ESMP are updated promptly and redisclosed as appropriate to address new issues.
- Ensure that the following measures are fully documented for the Project review:
    - E&S training activities for workers, activities related to the Code of Conduct, etc.;
    - Socialization with local communities conducted;
    - Performance of recommended specific management plans; and
    - KPIs (including the local community/stakeholder engagement plan, if applicable). Stage of Bidding Process Actions by PC/PO Team
- Ensure that the contractor will not undertake any activities other than survey work that does not involve land disturbance or involving the community unless contractor's risk

assessment and E&S management program for those activities have been reviewed and approved by Main Unit.

VI. MONITORING AND REVIEW

A. Monitoring

228. NEA's ESSD Monitoring Division will periodically monitor[33] E&S management performance for each project stage (e.g., construction, operation). Monitoring teams will include contractors, supervision engineers (if assigned), and representatives from other relevant teams. The relevant NEA project or operational coordination (P/OC) team will conduct monitoring[34] as needed during construction or operation stages.

229. The objective of monitoring is to identify emerging E&S risks, such as insufficient mitigation effects of relevant E&S management plans, contractor non-compliance, unanticipated impacts and risks, including stakeholder concerns. This is to ensure the objectives of the ESMS are achieved through necessary mitigation actions and corrective action plans.

230. The frequency and type of monitoring are determined by the significance level of project impacts. Projects with high or substantial risks will be monitored more closely and frequently than those with low or moderate risks. Monitoring details will be outlined in each project's Environmental and Social Management Plan (ESMP)[35]. The NEA monitoring team will conduct monitoring through site inspections, reviewing records/reports, stakeholder interviews, or a combination thereof, including, if necessary, a full-scale audit (refer to Section XX). The P/OC team may engage external supervision consultants/engineers or E&S consultants to carry out an audit on behalf of NEA, if necessary, with the P/OC team overseeing the external auditor and reviewing the resultant audit report.

231. In the event of identifying non-compliance during project execution against NEA's ESMS, and/or relevant E&S management plans, the P/OC team will coordinate with the ESSD Team to develop a Corrective Action Plan (CAP). This CAP may include revised or expanded mitigation measures, additional E&S experts with relevant experience, more frequent monitoring, rescheduling activities, among others.

232. Should non-compliance with NEA's ESMS, and/or relevant E&S management plans persist, the P/OC team or ESSD Team reserves the right to re-evaluate the project execution or withhold the payment to contractors until the non-compliance is rectified. Monitoring indicators and targets, locations, frequency, methodology, required monitoring records, and referenced standards will be based on the monitoring plan in the ESMP.

1. Project Monitoring Plan

233. The project ESMP will outline items or activities to be tracked as part of a Project Monitoring Plan (PMP). This will be created by the ESSD impact assessment (IA) team or E&S consultant during ESMP preparation (refer to Sections 4 and 5). The ESSD IA team, P/OC teams, and ESSD Management will review the PMP together at least once a year.

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33 Monthly, quarterly, biannually or annually as required and/or agreed
34 Daily, weekly, and/or monthly as required and/or agreed
35 This might be EMP in national legislative context

234. Project monitoring plan must be completed before launching the bidding process and included in the Tender Document to select a construction contractor, with support from the Procurement Team. The NEA team conducting the monitoring will ensure:

- Project Monitoring Plan has been communicated and understood throughout the project organization, including the ESSD and contractor, as applicable;
- Monitoring activities are conducted in accordance with the monitoring plan;
- Feedback, corrective and preventive actions are provided for all emerging risks and nonconformances found during/immediately after the monitoring activities;
- Sufficient resources (i.e., manpower, expertise, and budget) specified in the monitoring plan are provided for the monitoring as well as for the reporting activities.

2. Contractor's Monitoring Plan

235. The PMP in the ESMP will be included in the Tender Document requiring the selected contractor to develop a C-ESMP. They will work with NEA's project team (e.g., ESSD representative, P/OC team, or E&S Team) to monitor the C-ESMP implementation. The contractor should also assign experienced personnel for routine activity monitoring as per the project ESMP requirements.

236. The contractor's tender proposal should clearly state their commitment to proper monitoring, which will be reflected in the contract. The C-ESMP monitoring plan should include various management plans such as the Occupational Health and Safety (OHS) Plan, and Labour Management Plan. It will detail the personnel responsible, approach, location, timing, desired outcomes, and standards to be met.

3. Inspection

237. NEA's Project's E&S team or Supervising Engineer will inspect project sites daily or as required with the contractor's ESMP representative. Daily checks include environmental parameters (air quality, wastewater discharge) and OHS issues (work permit, PPE). Weekly checks cover items requiring more time (resettlement process, complaint handling, water quality). Specific protocols will be in the project ESMP and C-ESMP. The project's E&S team or Supervising Engineer will prepare and share inspection reports detailing gaps, incidents, and corrective measures with the P/OC teams and ESSD Monitoring Division. Reports will also be stored in the ESSD head office.

4. E&S Audit

238. When potential noncompliance is identified based on the Project Monitoring Plan, E&S audit will be carried out, NEA P/OC team in consultation with its E&S team will develop the audit methodology (e.g., site visit, remote audit), timeline (aligned with the overall project timeline and loan scheme), and steps for the audit (such as tendering consultant services as auditor). The E&S audit can be carried out by either the NEA internal audit team (ESSD Monitoring Division/Internal Audit Department) or an external E&S consultant.

239. The audit will review the actual performance of the project implementer against indicators set up in the project E&S management plans. It will assess the effectiveness of mitigation measures in addressing E&S impacts and/or relevant E&S mitigation targets agreed upon in

ESMP. The scope of the audit will be limited to the project site and affected areas, though information outside the project boundary will be collected from relevant parties within the NEA.

240. Findings, recommendations, responsibilities, and timelines for recommended actions resulting from the audit will be clearly communicated during the audit summary meeting and documented in the audit report. The E&S Team will monitor the audit process and follow-up actions. The P/OC team will distribute the audit reports to relevant NEA Directorates and the DPs upon validation by the E&S Team.

241. Self-monitoring report as per the EPA 2019 and EPR 2020 of IPP's project to be submitted to NEA. If non-compliance is noticed, then the ESSD can communicate to the concerned authority for correction/penalty.

B. Reporting

1. Contractor's E&S Performance Report

242. The contractor should prepare a monitoring report based on the format, style, and frequency outlined in the contractor's-ESMP. The contractor may either expand the NEA's standard reporting format to cover all E&S risks required by the project ESMP or expand their own reporting format with additional requirements specified in the project ESMP. Regardless of the approach, the monitoring requirements in the project ESMP should be met.

243. The NEA ESSD, or other designated teams as defined in the project ESMP, will review, provide feedback, and certify the contractor's E&S performance report, including proposed measures to address any gaps. If the contractor does not respond to the NEA's comments on the quality of reporting or fails to adequately address identified gaps, the contractor may receive a warning, notice of compliance, and/or experience payment withholding until full compliance is achieved, as specified in the contract. The NEA reserves the right to share the contractor's E&S report with the DP and the government, as detailed in the contract.

2. NEA's Internal Report

244. The ESSD will establish annual E&S performance reports that summarize the Project's E&S Performance. These reports can be developed using materials from the contractor(s)' E&S Performance Reports from respective projects. The bi-annual E&S performance report will provide an overview of the ESMS implementation performance by presenting selected Key Performance Indicators (KPIs) to show NEA's overall E&S performance for the projects governed under the ESMS. It will also cover implementation challenges and actions to address them, significant unaddressed E&S risks and impacts, major non-compliance issues, significant stakeholder inputs and grievances, capacity development plans, and other relevant information. Upon approval by P/OC team, these reports will be shared with the E&S Team to be compiled and used as evaluation materials during the Project-Level Management Review process and the ESMS Management Review process.

3. Incident-Related Report

245. If an E&S incident occurs, the ESSD in consultation with its Monitoring Division will prepare a report based on input from the supervision consultant/engineer and/or the Project's E&S team. This report, completed immediately after the incident, will indicate the necessary escalation level (project site, corporate, government, or DP). It will be submitted to the

appropriate reporting line and shared with the Project E&S Team as needed for discussion and action.

- Contractors involved in or witnessing an incident should report it to their reporting line as per the Contract.
- Some conditions that potentially triggers an incident reporting are:
- Near misses, occupational illness, occupational accident, injuries or fatalities to worker or community;
- Damage on key equipment or utilities caused by misconduct/misuse, criminal action, nature condition, etc.;
- Strikes, riots, criminal actions, allegations involving worker, community, or other parties;
- Spills, pollution incidents, fires, explosions;
- Regulator action in relation to E&S (e.g., sudden inspection, warning letter, temporary suspension, etc.); and/or
- Other unusual and emergency conditions.

246. The incident report will be prepared concisely and will include at a minimum: a description of the issue (including subject of incident, time, location, type, and severity), immediate actions taken by the project team, and proposed follow-ups (including actions and investigation if required). Additional details on incident notification and reporting can be found in the ESMS Management Guidelines.

4. Management Review

a. Project Level Management Review

247. Management review meetings will assess if: (i) the ESMP implementation is on track, (ii) mitigation measures need modification with NEA's support, or (iii) the ESMP cannot be effectively implemented, requiring a re-evaluation of the project or financing scheme.

248. Some materials that can be used as discussion instruments during management review are including, but not limited to the following:

- Monitoring report from NEA, contractor(s), and/or supervision engineer;
- Records from public consultation, stakeholder engagement, or grievance redress mechanism;
- Summary of detailed monitoring records;
- Key Performance Indicator of each team involved in the project;
- Incident record;

249. The E&S Team will keep the record of each management meeting and every decision that comes out from the meeting. The minutes of meetings will be stored for access in NEA’s intranet system.

b. ESMS Management Review

250. Once every year, the NEA Board will conduct an ESMS Management Review Meeting. The ESMS Management Review will bring key take-aways from several Project-Level Management Reviews as subject to be evaluated, taking into account the following:

- Overall improvement in ESMS implementation performance;
- Alignment of the ESMS with NEA's overall standard operating procedures including budget allocation and HR processes;
- Actions to improve ESMS performance including training and capacity development;
- Potential adjustments that may be needed in ESMS process to increase the quality of E&S performance;
- contractor management to improve E&S performance and minimize noncompliance; and
- Short-, medium- and long-term plans to improve ESMS performance.

251. ESSD will compile project information for management review. Meeting minutes will be stored on NEA's intranet system. Changes to the ESMS from the Management Review will also be considered.

VII. STAKEHOLDER ENGAGEMENT AND GRIEVANCE MANAGEMENT

A. Overview

252. NEA will actively and timely disclose corporate and project level ESMS information to demonstrate its E&S management performance and its ongoing efforts for performance improvement. NEA will also establish multiple communication channels to encourage and easily receive feedback from broad stakeholders including project affected people, media and civil society organizations, including grievances.

253. Specifically, NEA is committed to the following principles:

- Engage with all stakeholders, including women, vulnerable groups, and civil society organizations based on their interests and concerns.
- Involve stakeholders throughout the project lifecycle, from preparation to decommissioning, not just for regulatory purposes.
- Ensure fair and respectful interactions, respond to feedback in good faith, and require contractors to do the same.
- Document and publicly report concerns and suggestions from affected communities and other interested parties.
- Inform stakeholders of planned activities, locations, schedules, impacts, and mitigation plans in a timely, understandable, and culturally appropriate manner.

254. NEA's E&S team will launch the ESMS, making it accessible to the public and stakeholders via NEA's corporate website and other channels. The website will include mechanisms for the public to share inquiries, suggestions, or grievances, such as a hotline, email address, or web-based questionnaire, and NEA will respond as appropriate.

B. Stakeholder Engagement

255. NEA will allocate adequate resources and teams to implement stakeholder engagement activities to manage the risks and impacts associated with the project's stakeholders and reduce, liabilities and delays. Stakeholder engagement is an inclusive process conducted throughout the project lifecycle. When properly designed and implemented, it fosters the development of strong, constructive, and responsive relationships that are crucial for the successful management of a project's environmental and social risks. An outline of stakeholder engagement is shown in Figure 5.

Figure 5: Stakeholder Engagement

256. Stakeholder engagement is most effective when initiated by NEA at an early stage of the project development process, integrating it as a fundamental component of early project decisions and the assessment, management, and monitoring of the project's environmental and social risks and impacts. The nature, scope, and frequency of stakeholder engagement are proportionate to the project's risks and impacts. It is important to note that consultation meetings for E&S documents form part of but are not the entirety of stakeholder engagement. Continuous engagement through

multiple channels, including but not limited to town hall meetings, focus group discussions, and sensitive meetings with vulnerable groups is also required.

257. NEA will conduct stakeholder engagement in an inclusive manner, paying particular attention to the project-affected women, vulnerable groups, and indigenous peoples to ensure these groups can provide feedback during both project design and implementation. The NEA will conduct a thorough mapping of key stakeholders for each project. This process will assess stakeholders based on their level of impact, interest, and influence on the project's outcomes. Stakeholders may include: (a) people affected or likely to be affected by the project (project-affected parties) and (b) those who may have an interest in and impact the project (other interested parties). Other stakeholders may include government bodies, local communities, businesses, or environmental groups, each with varying degrees of interest and involvement. Stakeholder interests and concerns evolve over time, and not all individuals within a group share the same views. Stakeholder groups often interact and have interconnected relationships, so it's important to prioritize engagement based on their influence and relevance to the project.

258. Once identified and prioritized, the NEA will design a tailored engagement strategy for each group, considering the most suitable communication tools (e.g., meetings, FGDs, surveys, reports) and setting clear timings and frequency for interactions. This ensures that all stakeholders are effectively engaged throughout the project's lifecycle, fostering collaboration, addressing concerns, and ensuring the project's success and sustainability.

259. NEA should disclose the following information as early as possible (from the feasibility study stage and pre-construction phase) and within a timeframe that enables meaningful consultations with stakeholders regarding project design:

- The purpose, nature, and scale of the project;
- The duration of proposed project activities;
- Potential risks and impacts of the project on local communities, and the proposals for mitigating these, highlighting potential risks and impacts that might disproportionately affect vulnerable and disadvantaged groups, and describing the differentiated measures taken to avoid and minimize these;
- Potential risk and impacts that stakeholders including civil society organisations and parties who may not be directly affected by, but have some interests in, the project, whose actions may affect the project performance and cause reputational risks to the NEA;
- The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate;
- The time and venue of any proposed public consultation meetings, and the process by which meetings will be notified, summarized, and reported; and
- The process and means by which grievances can be raised and will be addressed.

260. A Stakeholder Engagement Plan (SEP) will be developed before the project starts, or as required by the DPs which ensures that stakeholders are properly identified, their expectations are understood, and their input is incorporated where appropriate. It will list all relevant stakeholders, including project-affected people, and internal and external parties, such as employees, customers, suppliers, investors, government agencies, and community members and assess each stakeholder's level of interest, influence, and potential impact on the project. This may include categorizing stakeholders based on their power and interest (e.g., high power, low interest; low power, high interest). It then outlines how and when the Project/NEA will engage with stakeholders based on their needs and communication preferences.[36]

36 An outline for a Stakeholder Engagement Plan, and best practice guidance is in Annex XXII

261. The ESSD/SSEMD E&S study team, in consultation with the project E&S team, will prepare the SEP for each investment alongside the ESA development. The SEP is an evolving document, beginning with a short action plan to identify and assess project stakeholders, including Project Affected Parties (PAP) and other interested parties. It will culminate in a detailed plan outlining ongoing stakeholder engagement processes, including engagement methods, communication channels, and grievance redress mechanisms.

262. Specifically, the SEP will include, at minimum:

- a systematic approach to stakeholder engagement processes throughout the investment lifecycle
- stakeholder identification and analysis
- processes to build and maintain constructive relationships with stakeholders, including but not limited to project-affected parties.
- the types of engagement that will occur (either through formal consultation or informal communications;
- how stakeholder's inputs will be dealt with from each type of engagement, and who will do it;
- which agency/unit of the NEA will be responsible for stakeholder engagement for a project.
- Financial and human resources required.

263. The SEP should be a living document, to be updated from time to time during the project lifecycle. Guideline on stakeholder engagement including how to develop stakeholder management plan is provided in Annex XXII.

C. Grievance Redress Mechanism

264. If issues or concerns arise during a project's lifecycle, the grievance redress mechanism (GRM) provides a means to communicate these issues back to the project (project management) for action. NEA's grievance redress mechanism is in place to proactively identify and address potential impacts as well as reactively manage and resolve issues and concerns that may arise during a project's lifecycle, and an essential part of project stakeholder engagement strategy (see Stakeholder Engagement and Grievances Redress Management Guidelines for further details).

265. The GRM is part of stakeholder engagement and establishes mechanisms to identify, evaluate, and address complaints or concerns from internal and external stakeholders. NEA will implement two grievance mechanisms: an internal one for staff; and an external one to allow all other stakeholders to file complaints and concerns regarding NEA's project and operational activities, impacts and processes.

1. Indicative Process Flow of an External Grievance Mechanism

266. Figure 6 shows the external grievance mechanism that NEA will use to meet the specific requirements of the ESMP and its operations ESMS. NEA will assess the relevance and/or severity of any external grievances received and determine the appropriate level of action to achieve a fair resolution. Once the Project GRM will be formed, all affected communities and other stakeholders within the project's area of influence will be made aware of the GRM as well as the procedure of accessing it. This includes dissemination of addresses and contact numbers GRM focal persons of all levels, and through (i) community awareness raising program and consultation meetings; (ii) leaflets and pamphlets distributed to the general public in the direct vicinity of the project site, in Nepali and translated in local languages as applicable; and (iii) notices on the radio and/or local newspaper, as well as notice boards on site office of project including in contractor's office, in offices of affected Rural/Municipality and other common places where people generally gathered and on project's website etc.

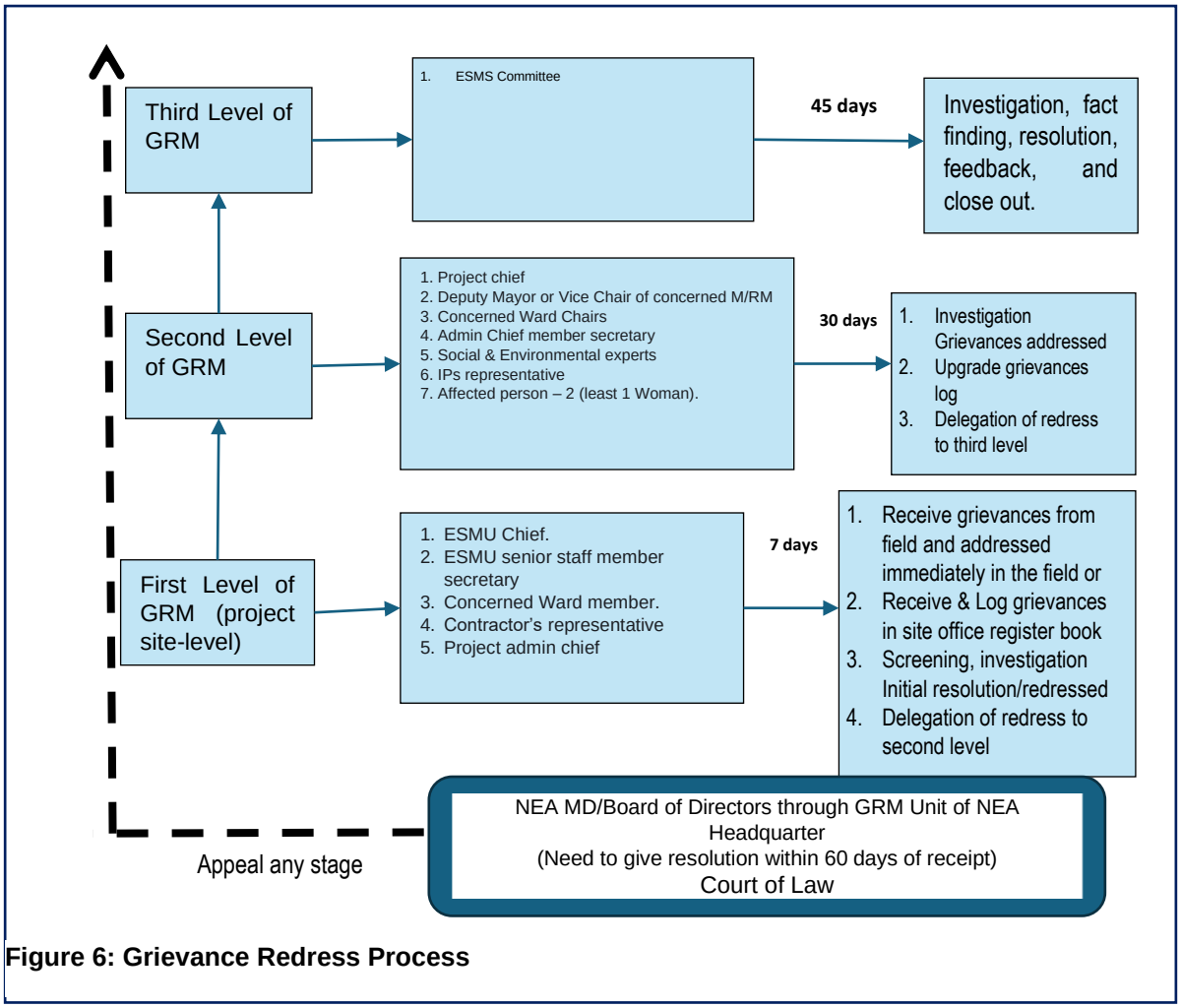


Figure 6: Grievance Redress Process

a. Submission

- ***Publicise the grievance mechanism***: NEA will ensure the procedure for filing grievances is publicly available and accessible through their website, district offices, or customer service centres. It will clearly state the contact details of the grievance officer or team.
- ***Define the types of grievance***: NEA will categorise the types of grievance that it will accept including issues related to project social and environmental impacts, consultation processes etc.
- ***Grievance submission channels***: NEA will provide multiple channels for PAPs and other stakeholders to submit their grievances. This may include email, phone, written letter, online forms, or in-person discussions with contractors or to district offices.

b. Receive, record, and acknowledge receipt

- ***Recording of grievance***: NEA will ensure that every grievance received is recorded in either a project or contractor database; or in an overall NEA grievance book.
- ***Acknowledged of grievance***. The individual or entity accepting the grievance is responsible for the recording and promptly sending/providing a response to acknowledge receipt and provide a reference number for tracking purposes.
- ***Escalation process***: NEA will develop clear procedures as part of the Project Communication Plan and its corporate policy to define a clear process for escalating grievances that cannot be resolved immediately. This may involve higher management or specialised teams or committees.

- ***Documentation and reporting***: NEA will maintain proper records of all grievances received and actions taken. This documentation will be useful for internal audits, compliance requirements, and reporting to lenders and other entities as required.

c. Assessment

- ***Assessment***: When a grievance cannot be resolved immediately (and documented) NEA will evaluate the nature of the grievance received to determine if it is genuine. This generally refers to an issue, concern, problem, or claim (perceived or actual) that an individual or community group wants NEA or its contractors to address and resolve. Questions, requests for information, and suggestions are not categorized as grievances and should be addressed through the stakeholder engagement process rather than the grievance redress mechanism.
- ***Team allocation***: Depending on the nature of the grievance, NEA will involve relevant ESSD team members to investigate. This decision will depend on the nature of the grievance in question and the specific expertise of the project implementation team.

d. Resolution

- ***Grievance Resolution***: NEA will conduct a thorough investigation of each grievance that is raised beyond initial resolution. This may involve gathering relevant information, contacting the parties concerned, and evaluating any supporting documents. NEA will aim to resolve grievances within 60 days of receipt.

e. Communication

- ***Communication***: NEA will keep the complainant informed about the progress of their grievance at various stages of the investigation and resolution and maintain clear communication channels to update them on the status.

267. Recourse to the project's GRM does not impede access to the country's judicial or administrative remedies. Affected peoples will be eligible for approaching to the court of law at any time and independently of the project's grievance redress process. Affected peoples, if eligibility also access to the DP's GRM whereby people adversely affected by DP-financed projects can express their grievances, seek solutions, and report alleged violations of DP's applicable E&S standards.

D. Public Communication

268. NEA will develop a system to regularly publicise E&S related information across Nepal, with particular focus on areas of NEA operations, to enhance information sharing and build understanding and trust in its processes. This may take the form of television and radio advertisements, and publicly available information posters and case studies advertised at district, provincial and project offices. The objective of the ongoing communication campaign will be to enhance trust in the NEA E&S processes, ensuring the ESMS, grievance and participation processes and overall E&S transparency are well understood.

269. NEA will also develop a plan for communication of emergency and urgent information related to events or field activities that affected people or communities. This will include some form of emergency and/or urgent notification to target area mobile phones. In addition, urgent notices, such as for construction or operation impacts, will be widely advertised throughout the project affected area.

E. External Reporting

1. Development Partners

270. NEA's E&S team will coordinate with PC/PO Team to produce or share reports on monitoring of ESMP implementation with the DP. Such reports may be included as part of broader project reporting requirement if committed as part of the loan (such as in the Project Administration Manual)

or prepared as a standalone document. Sharing or submission of the report to the DP will be conducted on an agreed timeline between NEA and the DP but should not be longer than once every one year. DPs will be informed if incidental issues occur through an incidence report or a more concise format as applicable to inform and address the urgency.

2. Independent Power Producers

271. As an Independent Power Producer (IPP), the IPP does not directly work under NEA's supervision. Aside from national regulations, the IPP will follow requirements dictated by its investors and is bound contractually with NEA only through the Power Purchase Agreement (PPA). To ensure that NEA's policy and commitment in the ESMS are accommodated by the IPP for project where NEA will be financed by DP, an agreement that stated so will be made between NEA and the IPP for example in the PPA or in a supplementary commitment/agreement letter of the PPA. The agreement will include clauses that imply the following purpose:

- IPP acknowledges that if its operations to some extent trigger conditions that conflict with NEA's Policy and Commitment, ESMS, or project's exclusion criteria, or cause impacts of very high and extreme significance after mitigation measures have been undertaken, NEA may consider re-evaluating the agreement with the IPP in accordance with the agreed contractual terms.
- IPP is expected to develop its own ESMS for the project, aligning with national and DP standards (if any). If IPP has not prepared any ESMS, it is suggested to adopt principles from NEA's ESMS as applicable; if it already has an ESMS, it should update it to align with NEA's ESMS.
- IPP will allow NEA to review its ESMS and provide input. IPP will cooperate by allowing NEA to monitor activities related to the implementation of the ESMS when needed.
- IPP agrees not to decline developing and implementing its ESMS. Any adjustments caused by the development and implementation of the ESMS should be discussed and resolved with NEA.

272. NEA's procurement team will prepare agreement clauses to meet these purposes in consultation with the Legal Team, using contractually acceptable language that aligns with Nepalese Law. They will consider the project context, timeline, and financing scheme.

273. The E&S team will review and validate these clauses to ensure that the IPP aligns as closely as possible with NEA's ESMS. These clauses will be provided to the IPP at the time of distribution of the IPP Tender Document. This will allow the IPP to understand NEA's ESMS requirements, review their position concerning the existing ESMS for the upcoming project (if applicable), and negotiate certain terms and conditions related to the applied ESMS with NEA.

274. In developing IPP's ESMS that align with principles of NEA's ESMS, IPP can refer to the ESMS IPP E&S Guidelines document.

VIII. CAPACITY BUILDING AND CHANGE MANAGEMENT

For the effective implementation of the ESMS, NEA needs appropriate institutional arrangement with adequate human and financial resources. It demands trained E&S specialists to identify and manage E&S risks within NEA's operations. After the endorsement of the ESMS by the NEA Board, it demands an additional institutional structure which is explained below. The ESMS, including its management guidelines, is a living document that allows changes/revisions/updates to be made upon it as and when required. For example, when there are changes in national regulatory framework, in development partners E&S standards, and in organizational structure.

A. Assessment of needs / Gap Analysis

275. Environmental assessment screening and categorization under EPA, 2019 and EPR, 2020 are primarily based on project size and capacity thresholds rather than being risk- or impact-based. Moreover, there are no provisions on social impact assessments (SIA), Resettlement Action Plans (RAP), or Indigenous People's Plans (IPP), CIA in these legislative instruments. The instruments do not adopt a mitigation hierarchy and stakeholder engagement is limited to public hearing. NEA lacks its occupational health and safety policy/standards and there is inadequate grievance redress mechanism. Currently, there are limited human and financial resources to manage and implement E&S risks of the NEA operations. There is no legal clarity on providing compensation to the non-title holders during land acquisition needed for the project. Since there are no dedicated standards for determining the environmental flow downstream of a dam, the issue of e-flow has always been contested. It is argued that there is limited meaningful consultation and FPIC process followed in NEA's projects. Since climate change is recently included as one of the ESSs of ADB, climate risk assessment and GHG monitoring are not considered in NEA project construction and operations.

B. Additional Staffing

276. In order to ensure effective implementation of the ESMS, the following institutional reforms are proposed within the existing three Departments of NEA:

1) Internal Audit Department

277. The Internal Audit Department is an independent organizational unit accountable for its work directly to the NEA Board and is functionally and organizationally distinct from the NEA's other units. The Department has been involved in providing independent assurance so that the organization's risk management, governance and internal control processes are operated effectively. The Department is headed by the Director and has been carrying out mainly three types of audits: a) Financial Audit b) Technical Audit and c) Management Audit of NEA operations. In order to fulfill the E&S internal audit, this ESMS has proposed the following structure (Section) with the following human resources under the Internal Audit Department.

Existing Department	Proposed Section	Proposed Position	Level	Proposed No. of Staff
Internal Audit Department	E&S Audit Section	Deputy Manager (Environment)	Level 9	1
		Assistant Director (Sociology)	Level 8	1
		Assistant Manager (Environment)	Level 8	1
		Total		**3**

2) Social Safeguards and Environment Management Department (SSEMD)

278. SSEMD, under the Project Management Directorate (PMD) of NEA is responsible for monitoring and implementation of the social safeguards and environmental mitigation on measures in the projects undertaken by PMD. The Department also prepares the environment and social monitoring reports for the projects under PMD as per the ADB requirements. The Department currently has one Division (Environment Management) and one section (Social Safeguards). The following structural changes have been proposed for the better functioning of the Department.

Existing Department	Existing Section	Proposed Division	Proposed Position	Level	Proposed No. of Staff
Social Safeguards and Environment Management Department	Social Safeguards Section	Social Safeguards Division	Joint Director	Level 10	1
			Total		**1**

3) Environment and Social Studies Department (ESSD)

279. ESSD, under the Engineering Services Directorate, executes all the activities related environmental and social aspects of hydroelectric Projects, transmission line projects, solar projects and other associated facilities which are being planned, designed, constructed or operated by NEA. This Department with its technical expertise has been involved in carrying out Impact Assessment (including EIA, IEE, BES, SIA, BIA, CIA), and preparing management plans (VCDP, RAP, LACP) along with environmental monitoring and implementation of mitigation measures and community support programs. The Department currently has 3 Divisions: a) Environment Study, b) Social Study and c) Environmental Monitoring. Given the existing context and additional roles and responsibilities of the ESMS, the following institutional strengthening, including Database Management Division, has been proposed within ESSD. For effective institutional performance, the proposed positions of Level 10 are to be exclusively designated for the sector specific staff in both Departments of SSEMD and ESSD.

Existing Department	Proposed Division	Proposed Position	Level	Proposed No. of Staff
Environment and Social Studies Department (ESSD)	Database Management Division	Joint Director	Level 10	1
		IT/Computer Engineer	Level 7	1
	ESMS Division	Manager	Level 10	1
		Deputy Director (Sociology)	Level 9	1
		Assistant Manager (Environment)	Level 8	1
		Assistant Director (Sociology)	Level 8	1
		Sociologist/GESI Officer	Level 7	2
			Total	**8**

280. At present, Geology and Environment streams are considered as Miscellaneous-Technical Services by NEA. A Geologist enters into NEA service at Level 7 in the Geological Investigation Department whereas the environmental expert enters into service at Level 7 either in ESSD or SSEMD. However, these separate streams of Geology and Environment do merge at Level 10. Currently there are 3 positions for level 10 (Manager) for miscellaneous-technical services; one single position each at the ESSD (Environment Study Division), SSEMD (Environment Management Division) and GID. However, the posting of level 10 Manager (Geologist) at ESSD and SSEMD has affected the full-fledged functions of the Divisions, which are primarily designated for environment assessment and management. Given the higher number of positions at level 9 of the geology streams (5 positions) compared to 3 positions of environment stream in level 9, there is always the higher probability of promotion of Geologist to level 10 and deputed to ESSD and SSEMD. In this context, the effectiveness of the proposed ESMS Division will be highly compromised. Therefore, it is highly recommended for the separation of the technical-miscellaneous services at level 10 into the specific streams with the specific departmental posting as proposed below.

Level	Existing Position-Service-Group	Currently Positioned at	Proposed Position-Service-Group	Proposed Positioning of Manager
10			Manager-Technical-Environment	• ESSD (Environment Study Division; proposed ESMS Division)

	Manager-Technical-Miscellaneous	• Geological Investigation Department • ESSD • SSEMD		• SSEMD (Environment Management Division)
			Manager-Technical-Geology	• Geological Investigation Department

281. In the same manner, Sociology, Economics and Statistics streams are considered as Miscellaneous-Administrative service by NEA. A Sociologist enter into NEA service at level-7 either in ESSD or SSEMD, an Economist enters into the same service at ESSD and Regulatory Compliance Department; whereas the Statistician enters into NEA service at level-7 only in ESSD. All of these streams currently merge at level-10. Despite having the sector specific Departments, SSEMD for Sociologists and Regulatory Compliance Department for Economists; the merging at level-10 often creates the difficulties, complexities in the smooth functioning of the respective Departments. Therefore, it is highly recommended for the separation of the administration-miscellaneous services at level 10 into the specific streams with the specific departmental posting as proposed below.

Level	Existing Position-Service-Group	Currently Positioned at	Proposed Position-Service-Group	Proposed Stations
10	Joint Director - Administrative-Miscellaneous	a) Regulatory Compliance Department b) ESSD	Joint Director-Administrative-Sociology	• ESSD • SSEMD
			Joint Director-Administrative-Statistics	• ESSD
			Joint Director-Administrative-Economics	• Regulatory Compliance Department

282. With the growing works in forest clearance and land acquisition, and to identify the potential impacts of HEP on aquatic biodiversity, sectoral experts on forestry/wildlife, land acquisition, aquatic biodiversity need to be included in the ESSD.

C. Additional financial requirements

283. In order for the ESMS to be effective in actual practice, required financial resources should be available for identifying and managing E&S risks.

D. Training Program

Effective delivery of E&S works demands adequate resources including capacitated human resources within the NEA system. On the one hand, the NEA has a limited number of professional staff members working in the E&S-related areas, the capacity of the E&S staff members is inadequate on the other. Strengthening capacity is a continuous process, the staff of the ESSD and SSEMD need professional training and exposure to emerging subjects and needy areas. For example, the use of software tools (e.g. GPS, GIS and RS) and approaches for alternative analysis, integrated biodiversity assessment, environment and social audits, hazard and risk management, cumulative impact assessment, impact of electromagnetic field on human health, and e-flow assessment are some of the areas that can be included in the training. Moreover, understanding on land valuation, designing mitigation measures for livelihood restoration and negotiating skills of the staff are needed. The Training Management Department needs to be made responsible for imparting training on E&S management during induction and regular training programs. Learning the knowledge systems and good practices in E&S risk management from other similar countries is also required for the staff.

Annex 1: ESMS Approval Letter

Nepal Electricity Authority

DECISION OF THE BOARD OF DIRECTORS OF NEA

NUMBER:

CONCERNING THE FORMATION OF THE TEAM FOR PREPARATION AND IMPLEMENTATION OF THE NEA ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM (ESMS)

THE BOARD OF DIRECTORS OF NEA consider:

that in order to carry out the mission of NEA to manage environmentally and socially aware business activities and ensure the Authority's environmental and social responsibility to realize sustainable development, NEA needs to continue to improve environmental protection and social management efforts

to meet international standards of environmental and social management required for projects funded by foreign financing, the Board hereby approves the Environmental and Social Management System (ESMS).

Annex 2: E&S Exclusion List for NEA

The NEA will not engage in any activity involving:

a. Activities that contravene Nepal's obligations under its international agreements
b. Destruction of High Conservation Value Areas (HCVA)[37] such as National Parks, Protected Areas, Unique Forest and Watershed, RAMSAR sites etc.
c. Activities involving harmful or exploitative forms of forced labor and/or harmful child labor
d. Project that release or potentially release significant amount of greenhouse gases and contaminants to the environment without measure to reduce them to acceptable levels.
e. Activities that impinge on the lands owned or claimed by Indigenous Peoples without their full documented consent
f. Storage and use of significant volume of hazardous chemicals.
g. Project that destroys important cultural heritage sites significantly.
h. Project that causes mass displacement/eviction of local communities.
i. Activities that involve the violation of human rights or human trafficking
j. Activities involving pornography and/or prostitution

[37] HCVA as per the national legislations and international commitments

Annex 3: Key Policy and Legislative Frameworks on E&S Safeguards in Nepal

1. Domestic Policy and Legislative Instruments

- Constitution of Nepal
- The 16th Plan (2024/25-2028/29)
- National Forest Policy 2019
- National Environment Policy 2019
- Land Acquisition Act 1977
- National Parks and Wildlife Conservation Act 1973 and its Regulations 1974
- CITES Act 2016 and its Regulations 2019
- Environment Protection Act 2019 and its Regulations 2020
- Labor Act 2017
- Local Government Operation Act 2017
- National Water Resources Policy 2020
- Water Resource Act 1992
- Electricity Act 1992
- Declaration on the Rights of Indigenous Peoples & International Labor Organization (ILO) Indigenous and Tribal Peoples Convention (Convention No. 169)
- Land Use Policy, 2015
- NEA's GESI Operational Guideline and Strategy 2020
- Guthi Land Act, 1976
- The National Civil (Code) Act, 2017
- Federation, Province and Local Level (Coordination and Inter-relation) Act 2020
- Sarkari Jagga darta, upayog tatha lizama upalabdha garaune sambandhi karyaniti, 2079 [Guidelines for registering, utilizing, and leasing government lands, 2022]
- Good Governance Act 2008
- Procedure for Providing Forest Areas for Other Purposes 2063 (2007) Constitution of Nepal, 2015
- Forest Act, 2019 and its Regulations, 2022
- Electricity Act, 1992 and its Regulations, 1993
- Nepal Electricity Authority Act, 1984
- Aquatic Animals Protection Act, 1961
- National Parks and Wildlife Conservation Act, 1973
- Public Health Service Act 2018
- Labor Act, 2017 and its Regulation, 2018
- Soil and Watershed Conservation Act, 1982
- Solid Waste Management Act, 2011
- National Trust for Nature Conservation Act, 1983
- Water Resource Act, 1992
- Plant Protection Act, 2007
- Public Roads Act, 1974
- Motor Vehicles and Transport Management Act, 1993
- Ancient Monument Protection Act, 1956
- National Foundation for the Development of Indigenous Nationalities Act (NFDINA), 2002
- Sexual Harassment at Workplace Prevention Act, 2015

- Hydropower Development Policy, 2001
- National Biodiversity Strategy and Action Plan (2014–2020)
- National Fisheries Development Policy 2024
- Nepal Gazette 2002-Part 52, No 7. Ministry of Agriculture and Livestock Development, GoN.

2. International Conventions and Agreements

Conventions	**Signature**	**Ratification**	**Party status**
United Nations Framework Convention on Climate Change	12 Jun 1992	02 May 1994	Ratification
Kyoto Protocol	01 Jan 1970	16 Oct 2005	Accession
Paris Agreement	22 Apr 2016	05 Oct 2016	Ratification
Convention on Biological Diversity	12 Jun 1992	23 Nov 1993	Ratification
Nagoya Protocol on Access to Benefit Sharing	29 Oct 2010	28 Dec 2018	Accession
Cartagena Protocol on Biosafety			Non-Party
United Nations Convention to Combat Desertification	12 Oct 1995	15 Oct 1996	Ratification
Convention on International Trade in Endangered Species of Wild Fauna and Flora	18 Jun 1975	16 Sep 1975	Accession
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	01 Jan 1970	15 Oct 1996	Accession
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	01 Jan 1970	09 Feb 2007	Accession
Stockholm Convention on Persistent Organic Pollutants	05 Apr 2002	06 Mar 2007	Ratification
United Nations Convention on the Law of the Sea	10 Dec 1982	02 Nov 1998	Ratification
Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat	17 Apr 1988	17 Dec 1987	Accession
Vienna Convention for the Protection of the Ozone Layer	01 Jan 1970	06 Jul 1994	Accession
Montreal Protocol on Substances that Deplete the Ozone Layer	01 Jan 1970	06 Jul 1994	Accession
Climate and Clean Air Coalition		2022	Partner

Annex 4: Environmental and Social Screening Checklist

Environmental and Social Screening Checklist is a tool used to assess the potential environmental and social impacts of a Project and provide guidance for next level of Environmental and Social Assessment (ESA). It is designed to identify and evaluate the risks and opportunities associated with the project in relation to environmental conservation, social responsibility, and sustainability. The checklist is used by NEA to review the potential environmental and social impacts of a project to determine the next level of Environment & Social Assessment (ESA). It is a tool to screen, classify, evaluate and identify E&S risks during planning phase all NEA operations.

(A) Project Background

1.	Name of Proposed Project	
2.	Location	Municipality/ Rural Municipality: _____ Ward No: _____ District: _____ Province: _____ Geographical coordinates: _____ Altitude: _____
3.	Project objectives	Electricity generation
4.	Brief description of the Project based on the location, terrain & surrounding appearance	
5.	Capacity of the subproject	
6.	Major planned structures and area (In m^2) in the site	
7.	Length of transmission or/and distribution line (in meter)	

(B) Quick E&S existing condition

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for "Yes" or "No"
1.	Is there any indication of: a. Significant adverse impacts on ecologically sensitive areas[38] b. Requirement of tree clearance c. Requirement of removal of structures (Privately or NEA owned) d. Acquisition of private land and displacements e. Possibility of community resistance to the project f. Significant adverse impacts to access to eco-system services g. Significant adverse impacts on the natural flow of river/stream h. Is the Project site located in the disputed territory?			

(C) Environmental and Social Screening

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for "Yes" or "No" if applicable
	Project's siting			
1.	Define Project's boundaries in four directions and define the area of influence			
2.	Is the Project site adjacent to or within any of the following sensitive receptors?			

[38] Significant adverse impacts on ecologically sensitive areas will be determined using international best practice and tools, as well as based on the outcomes of relevant studies within the ESA.

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
	i. Natural habitats and/ or legally protected areas (wetlands, forests, estuary, buffer zones, nature reserves); if yes, is there any possibility of a critical habitat present[39]? What is the range of endangered or threatened animals/birds/plant species (if known at the time of screening)?			
	ii. Cultural heritage site (e.g. temple, mosque)?			
	iii. Recreation or public gathering site			
	iv. Is the site aesthetically important?			
	v. Is the site located near the main settlement and trade centers? Description (approximate no. of HH and population, nature and special feature /importance/significance)			
	vi. Fragmentation of habitat of flora and fauna (Avifauna and mammalian fauna)?			
	vii. Are there any history of flood/river cutting / landslides in the site or in the areas near to the site?			
	viii. Are canals and irrigation systems present in proximity to Project site?			
	ix. Are there any water sources near or within the site?			
	x. Briefly describe the existing use of land in the surrounding area of the proposed site, nature (slope and facing)			
	xi. Briefly describe the existing use of land of the proposed site, nature (slope and facing)			
	xii. Is the Project site accessible by road through the year? Description of condition of road/track (blacktop, fair weather, etc.) or needs to construct a new road, total length, nearest road head, etc.			
	xiii. Does the road to the Project site from the main highway pass through human settlements?			
	xiv. Brief description of the ethnicity of the people living in the surrounding area of Project site/their major occupation, religion and language and economic status			

[39] Critical habitat is defined based on global good practice as a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value that meet the criteria of the World Conservation Union (IUCN) classification, including habitats of significant importance for required for critically endangered or endangered species as defined by the IUCN Red List of Threatened Species; habitats of significant importance for endemic or restricted-range species; habitats supporting globally significant concentrations of migratory species and /or congregatory species; areas with unique assemblages of species or which are associated with key evolutionary processes. Primary Forests or forests of High Conservation Value shall be considered Critical Habitats. This includes HCV forests. HCV areas do not directly correspond with definitions for modified, natural, and critical habitat. The HCV Resource Network, an internationally recognized group, provides information and support on the evolving usage of HCV to ensure a consistent approach. https://www.hcvnetwork.org/.

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
	xv. Is the proposed site located in an area inhabited by Indigenous people			
	xvi. Is the proposed site occasionally used by the public for social gathering/meeting/religious or recreational activities?			
	xvii. Is the proposed site being used as grazing land by locals?			
	xviii. Is the proposed site is being used by locals to access to other places or public resources such as forests, rivers, water sources, cultural and religious heritages/temples?			
	xix. Is there any public infrastructure (school, hospital, health post) in the surrounding area of the project site? If yes, provide brief descriptions.			
	xx. Will the Project’s construction cause any damage to the existing local roads system?			
Potential Environmental Impacts				
1.	Does the Subproject contravene Nepal’s obligations under its international agreements?			
2.	Impacts on natural resources that constitute livelihoods of the community (e.g., water resources, drinking water supply system, forest resources, fishing, grazing, or hunting grounds)?			
3.	Will the subproject involve substantial amount of earth works or hauling of materials?			
4.	Is there potential for landslide and soil erosion impacts during construction? If yes, please provide the following information: Past history of natural calamities in or surrounding areas of the proposed site (Dates, level of impacts in terms of loss of lives and property and mitigation measures applied so far and their impacts)			
5.	Will the Project cause the increase in waste generation? If “Yes”, describe types and expected amount of waste?			
6.	Will the Project generate substantial amount of wastewater (liquid waste) during construction and operation?			
7.	Will be the subproject generate substantial amount of air emission during construction and operation?			
8.	Changes in drainage patterns and resulting effects due to construction of project components and access roads?			
9.	Is the Subproject going to encroach into national parks of protected area, including their buffer zone?			
10.	Is the Subproject going to convert or degrade critical natural habitats?			

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
11.	Will there be forest loss in terms of area (if yes, type of forest: National Forest, Community Forest, Private Forest etc.?) Will it lead to loss of forest species (provide details of the loss of listed species according to national and international – specifically IUCN - classifications), if known at the time of screening?			
12.	Is the loss of Non Timber Forest Products (NTFP) possible? If so, provide the details if known at the time of screening.			
13.	Will the subproject involve draining or conversion of any wetland?			
14.	Is there presence of wildlife around the Project area?			
15.	If yes, provide information of the type of wildlife, if known at the time of screening? (Provide details of listed wildlife and avi-faunal species according to national and international – specifically IUCN - classifications, if known at the time of screening). Will there be any barrier to migratory birds or land animals by the construction of this project?			
16.	Other potential biodiversity impacts (specify)?			
17.	Loss or destruction of unique or aesthetically valuable land or natural resources			
18.	Will there be any disturbance due to material quarrying for construction?			
19.	Will Project activities involve GHG emissions?			
20.	If “Yes”, please provide description of the activities that will contribute to the GHG emission.			
	Labor and working conditions			
1.	How many workers the Project is planning to hire and how many of them are estimated to be women?			
2.	Will there be any foreign workers?			
3.	How many of the domestic workers are estimated to be hired from the project area?			
4.	Of the total workers, how many are estimated to be	Skilled: _____ Semiskilled: _____ Unskilled: _____ Engineers: _____ Technician/overshare: _____ Management/accounting: _____ Security guards: _____ E&S experts: _____ Others: _____		
5.	In terms of the categorization of the Project workers as the World Bank’s ESF, how many of them will be	Direct workers: _____ Indirect workers: _____ Primary suppliers’ workers: _____ Community workers: _____		
6.	How is the Project planning to manage the residency for the worker?	On their own (In the host community): _____ In a labor camp to be managed/constructed by project: _____		
7.	If the Project is expecting the migrant workers to manage their residency on their own, please provide the information on	Name & size of potential host communities (HHs): _____ Ethnic composition of the host communities: _____		

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
		Socio-economic status of the host communities: _____		
8.	If the Project is planning to manage/construct a labor camp, provide the information on	Probable location (s) of labor camp: _____ Status of basic facilities (power, water etc.): _____ Proximity of the camp from nearby settlement: _____		
9.	Does the Project have policies and provisions in the project for all types of project workers?			
10.	Does the Project plan to maintain and regularly update a labor registry throughout the project lifecycle?			
11.	Is there a policy that ensures nondiscrimination in wages and other facilities?			
12.	Does the Project plan to employ workers less than 14 years of age?			
13.	Does the Project plan to employ workers (between 14 and 18 years of age)?			
14.	Does the Project have plans to provide orientation to migrant workers about national laws, local tradition, culture, costumes, norms, and values?			
15.	Is there any safety concern to women once the migrant workers arrive in Project site?			
16.	Does the Project plan to provide orientation to workers about the national laws and project policies on GBV & SEA/SH?			
17.	Does the Project plan to provide orientation to workers about the risks of communicable diseases such as STDs?			
18.	Is there any history of conflict between the migrant workers and the local community?			
19.	Is there any possibility of conflicts between migrant workers and the local community?			
Potential Community and Occupational Health and Safety Impacts				
1.	Are there any community health and safety risks due to the use of equipment, machinery or the activities at the Project?			
2.	If the Project plans to transport, storage, and use and/or disposal of materials that may create physical, chemical, and biological hazards?			
3.	Will the construction works disturb the normal functioning of other commercial/community/residential activities?			
4.	Will the Project create noise/vibration beyond the level permitted by the law?			
5.	Will it create dust pollution around the sites?			
6.	Will it temporarily stop or impact/pollute the water supply and sanitation system in and around the site?			
7.	Are there any potential impacts to public health and safety due to changes in the landscape for Project?			

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
8.	Are there any risks to community safety due to accidental and natural hazards during Project construction and operation?			
9.	Will there be any solid waste generated by Project that needs to be transported off-site for reuse, recycle or disposal of?			
10.	Will any liquid waste, or an item containing liquids (including oils), needs to be transported off-site for reuse, recycle or disposal of?			
11.	Will any explosive and hazardous chemicals be used within the project?			
12.	Will building materials containing asbestos be removed/disposed of?			
13.	Will any building materials be removed/disposed of that are coated with lead-based paint?			
14.	Will any building materials be removed/disposed of that contain lead, silver or chrome?			
15.	Will the Project use batteries (lead-acid or nickel-cadmium) as its components?			
16.	If “Yes”, please briefly explain how the Project plans safe transportation, storage and use and disposal of the batteries.			
17.	Please briefly explain how the Project plans to remove/dispose of lead-acid or nickel-cadmium batteries battery-powered or battery-backup items?			
18.	Will mercury-containing devices (switches, gauges, thermostats) be removed/disposed?			
19.	Will an emergency generator set or other aboveground storage tanks (AST) be installed or removed?			
20.	Is there any provision to control possible trespassing of non-project staff on the project site during construction and operation?			
21.	Does the Project plan to provide orientation to surrounding communities about the risks of communicable diseases and COVID-19?			
Land Acquisition and involuntary resettlement				
1.	Will there be permanent land acquisition for the power generation site of the Project?			
2.	If “Yes”, please provide information about the types of land that will be acquired. Private land Government/Public land			
3.	If the Project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation			
4.	Will there be a temporary land acquisition for the Project?			
5.	If “Yes”, please provide information about the types of land that will be temporarily acquired.			

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
6.	Will there be permanent land acquisitions to evacuate the power (transmission line) in the Project?			
7.	If “Yes”, please provide information about the types of land that will be acquired. Private land Government/Public land			
8.	If the Project is planning to acquire private land, please provide information about the process of acquisition Voluntary donation Involuntary acquisition Negotiation			
9.	Will there be a loss of productive land?			
10.	Will there be any physical/economic displacement and impact on livelihoods?			
11.	Is there any household that needs relocation?			
12.	If there is any physical/economic displacement, please provide information on How many people/families will be displaced? What will be the scale of economic displacement? What will be the scale of impact on livelihoods of impacted people/families How does the project plans to help the impacted people/families restore their livelihoods?			
13.	If the Project plans to acquire private land, please provide information on how it will compensate the lost/impacted assets			
14.	Apart from compensation, does the Project plans to provide additional supports to impacted person/family?			
15.	Will there be any adverse impact on non-titleholders including loss of shelter and livelihood?			
16.	Will land acquisition result in loss of income loss of access to common property resources?			
Indigenous and vulnerable People				
17.	Are there any vulnerable people, such as Dalits, religious minorities, landless, people with disabilities/chronic disease, women-headed households and elderly households among project-affected people?			
18.	Are there any indigenous people among the identified project-affected people?			
19.	If “Yes”, please mention the type of project-related impact to the indigenous people.			
20.	Are the indigenous or vulnerable people being impacted by economic or physical displacement?			
21.	Are there any indigenous people residing in the immediate vicinity of the project site?			
22.	Is there a need to secure FPIC?			
Cultural Heritage				

S. N.	Screening Questions	Yes	No	Comments Provide information/justification either for “Yes” or “No” if applicable
23.	Does the proposed site or surrounding area host any cultural and religious heritages/temples/structures?			
24.	Will the Project cause encroachment on historical/cultural/religious areas?			
25.	Will there be any adverse impacts on cultural heritage due to Project activities?			
26.	If “Yes”, please explain briefly			
27.	Does the proposed site or surrounding area host any cultural or religious event/ gathering?			
28.	If “Yes”, please provide a brief description of the event			
29.	Does the proposed site provide access to any cultural/ religious heritages or temples or sites?			
Climate Change				
30.	Will the project activities release substantial amount of GHGs?			
31.	If it has been identified that climate change might affect the implementation of project activities or their effectiveness and sustainability, has this been addressed by mitigation measures?			
32.	If there is a risk that the project might increase the vulnerability of local communities and the ecosystem to current or future climate variability and changes, have these issues been addressed by mitigation measures?			
33.	Are opportunities sought to enhance the adaptive capacity of communities and ecosystem to climate change?			
Stakeholder engagement				
34.	Have the stakeholders of the Project been identified?			
35.	If “Yes”, please name them along with their level of influence and interest in the Project			
36.	Have the stakeholders been categorized in terms of gender, age, ethnicity?			
37.	Major issues raised by the stakeholders during the initial consultation?			
38.	What are the main sources of information for the stakeholders? [Hint: radio, TV, newspapers]			
39.	Is there is social institution/practice for community consultation on common issues in the area?			
40.	Is there any social/religious/cultural institution or practices for local dispute settlements?			
41.	Are there any youth clubs, women groups or NGOs active in the project area and in the district?			
Contextual risk				
1.	Is there any history of community conflict in the Project area?			
2.	Is there any history of protests against infrastructure projects in the area?			

S. N.	Screening Questions	Yes	No	**Comments** Provide information/justification either for “Yes” or “No” if applicable
3.	Provide a brief description about nature of crimes, if any, observed in the project area in last two years. [Hint: Source of information local police station]			
4.	Which political parties won the last local election? [Municipal and the ward of the project site]			
5.	Which political parties won the last parliamentary election from the constituency of the project site?			
6.	What are the major economic activities in the municipality? [Hint: Occupation, local exports, etc.]			
7.	Please name the major industries/institutions located in the municipality.			
8.	Which are the major market centers in the Project area and how far are they?			
9.	Is there a board community support for the Project? [Hint: Community perception based on stakeholder consultation]			
10.	If “Yes”, please scale the support in terms of “very strong”, “strong”, “moderate, and “low” based on community consultations.			
11.	Is there support from the local municipality for the project?			
12.	If “Yes”, please scale the support in terms of “very strong”, “strong”, “moderate, and “low” based on consultation with municipality officials			

Annex 5: E&S Standards of the ADB

(i) Environmental and Social Standard 1 (ESS1): Assessment and Management of Environmental and Social Risks and Impacts;

(ii) Environmental and Social Standard 2 (ESS2): Labor and Working Conditions;

(iii) Environmental and Social Standard 3 (ESS3): Resource Conservation and Pollution Prevention;

(iv) Environmental and Social Standard 4 (ESS4): Health, Safety, and Security;

(v) Environmental and Social Standard 5 (ESS5): Land Acquisition and Land Use Restriction;

(vi) Environmental and Social Standard 6 (ESS6): Biodiversity Conservation and Sustainable Natural Resources Management;

(vii) Environmental and Social Standard 7 (ESS7): Indigenous Peoples;

(viii) Environmental and Social Standard 8 (ESS8): Cultural Heritage;

(ix) Environmental and Social Standard 9 (ESS9): Climate change; and

(x) Environmental and Social Standard 10 (ESS10): Stakeholder Engagement and Information Disclosure

Annex 6: Summary of Gap Analysis Report

Policy Gap Analysis

This section presents a summary of a gap analysis comparing Nepal's national regulatory framework for Environmental and Social (E&S) risk management, which NEA is required to comply with, against the Environmental and Social Standards (ESS) of the Asian Development Bank (ADB) and the World Bank. It identifies areas where national regulations align or diverge from the ESS, highlighting gaps that may require attention to ensure NEA's compliance with the higher standards set by these development partners. The analysis aims to inform strategies for bridging these gaps and strengthening NEA's E&S risk management practices.

Relevant Nepal Regulatory Framework

A range of national laws, regulations, plans, and policies govern the management of E&S risks in Nepal, and the NEA is mandated to comply with them. A detailed list is contained in Annex A.

Relevant Development Partner Regulatory Framework

NEA must also adhere to the environmental and social policies and standards of institutions such as the Asian Development Bank (ADB) and the World Bank (WB) to be eligible for their financing. These policies are now mostly aligned. The World Bank Environmental and Social Framework (ESF) contains ten environmental and social standards (ESSs) that outline the requirements for borrowers to identify and assess environmental and social risks and impacts for projects supported by the Bank and applies to all projects approved from 1 October 2018 onwards. ADB's ESF also comprises ten similar ESSs specifying mandatory requirements for its borrowers and clients. A straightforward comparison of the two frameworks is shown in Table 1.

Table 1: Environmental and social standards of WB & ADB

ESS	**World Bank's ESF**	**Asian Development Bank's ESF**
ESS 1	Assessment and management of environmental and social risks and impacts	Assessment and management of environmental and social risks and impacts
ESS 2	Labor and working conditions	Labor and working conditions
ESS 3	Resource efficiency and pollution prevention and management	Resource conservation and pollution prevention
ESS 4	Community health and safety	Health, safety, and security
ESS 5	Land acquisition, restriction on land use and involuntary resettlement	Land acquisition and land use restriction
ESS 6	Biodiversity conservation and sustainable management of living natural resources	Biodiversity and sustainable natural resources management
ESS 7	Indigenous peoples/sub-Saharan African historically underserved traditional local communities	Indigenous peoples
ESS 8	Cultural heritage	Cultural heritage
ESS 9	Financial intermediaries	Climate change
ESS 10	Stakeholder engagement and information disclosure	Stakeholder engagement and information disclosure

The following assessments compare the Nepal regulatory framework with those of the DPs, arranged by each of the 10 ESSs. Where there are differences between ADB and WB frameworks, these are noted in the text.

ESS 1: Assessment and Management of Environment and Social Risks and Impacts

ESS 1 provides the overall basis for an integrated E&S assessment and management process. The assessment is undertaken in a proportionate manner based on the potential risks and impacts of a project. The objectives of this standard are to (i) screen and scope, assess, manage, and monitor the environment *and* social risks and impacts of a project; (ii) adopt a mitigation hierarchy approach; (iii) require that a project is environmentally and socially sound and sustainable, and support the integration of environment *and* social considerations into the project decision-making process; (iv) adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, taking into account gender-related risks, and ensure that they are not disadvantaged in sharing the development benefits and opportunities resulting from a project; and (v) promote improved environment *and* social performance in ways that recognize and enhance borrower and client capacity.[40]

The Constitution of Nepal underscores a resolute commitment to environmentally sustainable development, harmonizing economic progress with the preservation of the environment. Article 30 of the constitution establishes the right of citizens to inhabit a clean and healthful environment. It also delineates the duties and prerogatives of all Government entities to advance environment-friendly development.

The Government of Nepal (GoN) recognized the imperative of conducting environmental assessments for major infrastructure projects for the first time during the Sixth Five-Year Plan (1980-85). Subsequently, in the Seventh Plan (1985-90), the government introduced comprehensive environmental conservation policies. This led to the approval of guidelines in 1993 that incorporated environmental assessment principles directly into project designs. The guidelines' impacts remained limited due to its applicability solely to government-financed infrastructure projects despite being a significant stride toward institutionalizing comprehensive Environmental and Social (E&S) assessments and associated mitigation measures.

A pivotal shift occurred when the GoN introduced the Environmental Protection Act (EPA) in 1996, thereby establishing a legal requirement for E&S assessments in development projects and other ventures. The EPA of 1996 outlined two forms of E&S assessments—Environment Impact Assessment (EIA) and Initial Environment Examination (IEE)—determined by predetermined parameters delineated in the Environment Protection Rules (EPR) of 1997. Subsequently, to align with the new three-tiered governance structure, the EPA of 1996 and the EPR of 1997 were revised and re-enacted as the EPA of 2019 and the EPR of 2020.

The EPA (2019) and EPR (2020) require an environmental assessment (EA) when (i) a development may bring about changes in existing environmental conditions, or (ii) a plan, project, or program changes land use. The type of EA required depends on the size and sector of the project/investment, and is set out in the EPR Schedule 1, 2 &3 and includes robust screening processes. They mandate detailed analysis of adverse environmental impacts, alternatives, risk mitigation, monitoring, and community consultations. There are provisions for strategic environmental analysis and climate change. Projects cannot begin without EA report approval (EPA (2019), Section 7), and approved EA reports must be published within seven days (EPR (2020), Rule 9[6]). Nepal currently lacks standalone legislation specifically governing Social Impact Assessment (SIA). While various laws address environmental and social concerns, they do not provide a unified approach to SIA. The concept of SIA is generally included within environmental impact assessment (EIA) procedures but is not regulated by an independent law.

An analysis of the gaps between the NEA's general practices, GoN EPA/EPR legislation and the requirements of the World Bank and ADB ESS 1 reveals the following:

[40] ADB. 2024. Environment and Social Framework, Manila

- ***Possible oversight of impacts on smaller projects***. Environmental assessment screening and categorization under EPA (2019) and EPR (2020) are primarily based on project size and capacity thresholds rather than being risk- or impact-based, as required by ESS's. This approach may overlook specific environmental and social risks associated with smaller projects, highlighting a key gap in alignment with international best practices.

- ***Omission of social safeguards.*** The EPA (2019) and EPR (2020) lack provisions for comprehensive social impact assessments (SIA), Resettlement Action Plans (RAP), or Indigenous People's Plans (IPP), and they are therefore generally omitted in domestically funded projects. However, NEA practice is to conduct these assessments and prepare necessary reports for projects funded by DPs. However, often report quality falls short of international standards due to weak institutional capacity, limited expertise, lack of awareness of global best practices, lengthy hiring processes, and insufficient financial incentives.

- ***Lack of mitigation hierarchy.*** The EPA (2019) does not adopt a mitigation hierarchy to avoid, minimize, mitigate, and, if necessary, compensate or offset environmental and social (E&S) risks and impacts. Similarly, there are no specific provisions for identifying and engaging indigenous peoples (IPs) marginalized communities, or vulnerable groups to assess and manage risks throughout the project cycle. EPR (2020) also lacks provisions to address human security risks, such as gender-based violence (GBV) and sexual exploitation and abuse / sexual harassment (SEA/SH).

- ***Limited stakeholder engagement.*** Stakeholder consultation is limited to public hearings during EA preparation (EPA (2020) Rule 6, Sub-rule 3), with none required after the EA is completed. Issues and concerns raised in the public consultations are documented but there is no practice of reporting back to the stakeholders. NEA conducts stakeholder engagement typically during the pre-construction phase to develop mandatory E&S documents but this is rarely continued during construction. While NEA mitigation plans recommend periodic engagement, it usually occurs only when projects face local opposition. NEA does update E&S documents and seek stakeholder consent for project changes, however, there is an inconsistent approach to engaging and informing stakeholders throughout the project lifecycle.

- ***Negligible cumulative or associated impact assessment requirement.*** The EPA (2019) and EPR (2020) lack provisions for cumulative impact assessments, regional assessments, transboundary or supply chain risks, and defining associated or linked facilities and activities. They also do not address occupational and community health and safety, land tenure, land acquisition and resettlement, or indigenous peoples' rights.

- ***Lack of robust or practical alternative analyses.*** EIA and IEE reports are required to include "alternative" analyses, however, these are typically limited to a brief "no project" option and lack comprehensive comparisons of technical, financial, social, and environmental alternatives.

ESS 1: Assessment and Management

ESS 1 outlines the process for assessing and managing environmental and social (E&S) risks in projects. It requires:

- Screening and scoping based on potential risks
- Adopting a mitigation hierarchy approach
- Ensuring sustainability and soundness of projects
- Differentiated measures for disadvantaged groups
- Promoting improved E&S performance

The Constitution of Nepal emphasizes environmentally sustainable development. The EPA (2019) and EPR (2020) mandate environmental assessments (EA) for projects, with detailed analysis of impacts, alternatives, risk mitigation, and community consultations. They require approval and publication of EA reports.

Key Gaps Identified

- Oversight of impacts on smaller projects due to size-based categorization.
- Absence of comprehensive social safeguards like SIA, RAP, and IPP.
- Lack of a mitigation hierarchy for E&S risks.
- Limited stakeholder engagement post-EA.
- No requirement for cumulative or associated impact assessments.
- Inadequate alternative analyses in EIA/IEE reports.

ESS 2: Labor and Working Conditions

284. ESS 2 focuses on promoting fair treatment, non-discrimination, and safe working conditions for project workers. It aligns with Nepal's Labor Act (2017), Child Labor Act (2001), and Bonded Labor Prohibition Act (2022), which emphasize non-discrimination, minimum wage, occupational health and safety, and the prohibition of child and bonded labour.

Key Objectives:

- Promote fair treatment, non-discrimination, and equal opportunity for project workers.
- Prevent and address violence, harassment, bullying, intimidation, and exploitation.
- Support freedom of association and collective bargaining.
- Prevent the use of forced labor and child labor.
- Maintain transparent project worker management relationships.
- Provide accessible means for workers to raise workplace concerns.

Gaps Identified:

- **Lack of formal labor contracts**: Many workers, especially in NEA projects, are recruited informally with little documentation.
- **Inadequate occupational health and safety standards**: Poor implementation of safety measures and lack of worker awareness.
- **Inadequate worker grievance redress mechanism**: Although mandated by law, it is not commonly practiced in NEA operations.
- **No provision for labor management procedures**: Such procedures are not required by Nepali law and are seldom prepared for domestic projects.
- **Bonded labor practices continue**: Despite legal prohibitions, such practices persist, highlighting enforcement gaps.

ESS 3: Resource Conservation and Pollution Prevention

ESS 3 focuses on minimizing pollution and promoting resource conservation. It recognizes that economic and social activities often generate pollution and consume finite resources, which can threaten people, the environment, and ecosystem services. The objectives of ESS 3 are to:

- Promote the sustainable use of resources, including energy, water, soil, and raw materials.
- Avoid or minimize adverse impacts on human health and the environment from pollution generated by project activities.
- Minimize project-related emissions and discharges that pollute air, water, and soil.
- Manage hazardous and non-hazardous waste appropriately.
- Address risks associated with the use, storage, and production of hazardous chemicals and materials.
- Manage risks associated with pesticide use.

Nepal's Constitution emphasizes environmental protection for pollution prevention and management. Key laws include the Environmental Protection Act (EPA) 2019 and Environmental Protection Rules (EPR) 2020, which set standards for pollution control and resource management. Additional laws like the Solid Waste Management Act (2011) and Water Resources Act (1992) further regulate environmental pollution.

The Nepal Electricity Authority (NEA) undertakes environmental and social studies and complies with national and international legislation. The Environmental Management Plan (EMP) ensures that commitments to minimize environmental impacts are upheld throughout all project phases.

Gaps Identified:

- **No enabling mechanisms on resource use efficiency**: While Nepal has comprehensive legislation on pollution prevention and management, there are inadequate mechanisms to ensure and encourage resource use efficiency.
- **Limited institutional capacities for enforcement**: There is a lack of resources, infrastructure, and centralized monitoring to enforce environmental regulations effectively.
- **Lack of resource efficiency considerations**: More effort is needed during project design, assessment, and implementation to ensure compliance with resource efficiency standards.
- **Need for improved pesticide and hazardous waste management**: Management of pesticides and hazardous waste requires more attention in all NEA construction projects and operational practices.

ESS 4: Health, Safety and Security

ESS 4 recognizes that project activities, equipment, and infrastructure may increase the potential for project workers and communities to be exposed to health, safety, and security risks. The standard sets out the requirements on assessment, planning, management, and monitoring of a project's safety and security risks and impacts on project workers and communities. The objectives of the standard are to (i) protect and promote the health, safety, and security of project workers by promoting a culture of safety, ensuring safe, healthy, and secure working conditions, and implementing protective measures; (ii) anticipate and avoid and, where avoidance is not possible, minimize, mitigate, and respond to adverse impacts on health, safety, and security; (iii) consider potential geophysical and physical climate risks and impacts in the design and construction of infrastructure; (iv) avoid and, where avoidance is

not possible, minimize and mitigate the exposure of persons and communities to project-related traffic and road safety hazards, diseases, and hazardous chemicals, substances, materials, and wastes; and (v) ensure that personnel and property are safeguarded in a manner that avoids or minimizes risks to project workers and project-affected persons.

The Constitution of Nepal requires policies which support citizen access to health services including reference to gender, disability, and minority rights. The EPR (2020) includes references to health and safety impacts in the standard format requirements for IEE and EIA. The National Environmental Health Impact Assessment Guidelines (2002) apply to development projects and provide a useful resource to enhance health and safety assessment in IEEs and EIAs. Further protections relating to community health and safety may be found in a variety of other legislative instruments, including in relation to traffic and road safety, hazardous materials, occupational health and safety, and pesticide/explosives management.

The typical NEA EIA evaluates physical and chemical environmental conditions, considering potential emergency events such as floods, dam failures, earthquakes, landslides, and Glacial Lake Outburst Floods (GLOFs). The likelihood of these events is assessed for a period throughout the project's lifecycle. Based on this evaluation, the project proponent develops a Disaster Preparedness and Management Plan, which is typically included as part of the Environmental Management Plan (EMP) within the EIA. However, for major hydropower projects, particularly large-scale projects involving foreign investment, a separate Disaster Management Plan is often prepared and endorsed by the licensing authorities. This plan primarily focuses on emergency response, safety measures, and alert systems.

A gap analysis between the national health, safety, and security laws; NEA's general practice and ESS 3 reveals the following:

- ***Inadequate occupational health and safety (OHS) regulatory framework.*** Nepal doesn't have a strong regulatory framework that compels project to assess possible adverse impacts on health and safety on local communities and prepare or implement mitigation measures. Most EIAs only undertake limited assessment of OHS standards, particularly hazards of deep excavations, road safety hazards and water quality along with dust and noise pollution.

- ***Lack of standards for OHS and emergency response plans.*** The EIA/IEE process conducted by NEA mandates the inclusion of an emergency response plan (ERP) to address potential emergency scenarios such as floods, dam failures, earthquakes, landslides, and (GLOFs). The current legislations also acknowledge some fundamental aspects of dam safety. However, formal and established requirements for determining the standards a dam must meet to ensure its safety are lacking and only cursory assessments and preparedness are undertaken.

- ***Health impact assessments are not mandatory.*** The Nepal Environmental Health Impact Assessment Guidelines are not mandatory. There are no regulations to ensure requirements for public health impact assessments under the Public Health Service Act 2018 are undertaken or monitored. These assessments are also not incorporated into EA requirements.

- ***Traffic management and safety is not mandatory.*** There is no specific EPA (2019) or EPR (2020) requirement to identify and respond to traffic and road safety risks, including preparation of a traffic management plan. The Public Roads Act 1974 and the Motor Vehicles and Transport Management Act 1993 do not require road safety measures as part of project assessment and planning.

ESS 5: Land Acquisition, Restriction on Land Use and Involuntary Resettlement

ESS 5 outlines the requirements for project-related land acquisition and land use restrictions (LA/LUR). It also updates the requirements for involuntary resettlement covered by the ADB Safeguard Policy Statement (2009). The objectives of ESS 5 are to:

- Avoid economic and physical displacement or, when unavoidable, minimize such displacement by considering feasible alternative project designs and sites.

- Avoid forced eviction.

- Mitigate unavoidable adverse social and economic risks and impacts from LA/LUR by providing timely compensation for loss of assets at full replacement cost and assisting affected persons in their efforts to improve or at least restore their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

- Improve livelihoods and living conditions of disadvantaged or vulnerable persons.

- Ensure that LA/LUR activities are planned and implemented through appropriate stakeholder engagement, including information disclosure, meaningful consultation, and grievance management.

Key Regulations in Nepal:

- **Constitution of Nepal**: Guarantees property rights and mandates compensation for land acquired for public purposes.

- **Land Acquisition Act (LAA) 1977**: Empowers the government to acquire land with compensation and outlines the process for compensating private landowners.

- **Policy for Land Acquisition, Resettlement, and Rehabilitation for Infrastructure Development Projects Nepal (PLARR, 2015)**: Provides guidelines for land acquisition and resettlement in externally financed projects.

Key Gaps

- **No provision for design alternatives**: The LAA lacks provisions for adopting a mitigation hierarchy to minimize involuntary resettlement through exploration of project and design alternatives.

- **Exclusion of non-title holders, IPs, and vulnerable groups**: The LAA limits compensation to formal landowners with legal titles, excluding non-title land users such as tenants, informal settlers, and encroachers.

- **No mandate to restore or compensate livelihood loss**: The legal framework does not mandate the enhancement or restoration of displaced persons' livelihoods to pre-project levels.

- **No provision for improving living standards**: The LAA does not require the enhancement of living standards for displaced poor and vulnerable groups.

- **No provision for replacement housing**: The LAA does not provide provisions for replacement housing or the restoration of livelihoods for those whose homes or significant sources of income are lost due to land acquisition.

- **Inadequate social impact assessment and mitigation**: Mandated EIA/IEEs often undertake minimal or cursory attention to social impacts.

- **Vulnerable groups are often excluded in E&S assessment**: The current framework lacks a social assessment for these categories of Project-Affected Persons (PAPs), particularly those with informal land tenure or marginalized communities.

- **Lack of comprehensive assessment of all land acquisition impacts**: There is no explicit regulatory requirement to assess and identify the past, present, or future impacts and risks associated with involuntary resettlement.

- **No standards for valuation or compensation**: Regulations lack clear principles, procedures, and standardized criteria for land valuation or requirements for livelihood restoration.

- **Inadequate capacity for comprehensive and timely acquisition and compensation**: The District Administrative Office faces significant delays due to its heavy workload.

- **No requirement for a formal grievance redress system**: Limited scope under the Acts for redressing grievances and complaints, and no independent grievance mechanism for dealing with compensation, displacement, and resettlement issues.

- **No consistent stakeholder engagement process or requirements**: The LAA does not require systematic stakeholder engagement, limiting consultations to landowners during the acquisition process.

ESS 6: Biodiversity and Sustainable Natural Resources Management

ESS 6 sets out the requirements for the conservation of biodiversity and the sustainable management of living natural resources. The objectives of this standard are to:

- Protect and conserve biodiversity and ecological function and connectivity in a changing climate.

- Apply the mitigation hierarchy and the precautionary approach to achieve a minimum of no net loss and, preferably, a net gain of biodiversity.

- Maintain the benefits from ecosystem services and promote the sustainable management and use of living natural resources.

Nepal's Constitution emphasizes biodiversity conservation and mandates the state to safeguard, foster, and ensure the sustainable utilization of forests, wildlife, avian species, flora, and biodiversity. Nepal is also a party to key international conventions related to biodiversity conservation and the management of living natural resources.

Key legislation includes the Aquatic Animals Protection Act (1961), National Parks and Wildlife Conservation Act (1973), Soil and Watershed Conservation Act (1982), National Trust for Nature Conservation Act (1983), Forest Act (2019), and Plant Protection Act (2007)4. The Environmental Protection Act (EPA) 2019 and Environmental Protection Rules (EPR) 2020 require an Environmental Impact Assessment (EIA) for projects impacting designated protected areas or using more than 5 hectares of forest land.

Gaps Identified:

- **Lack of environmental flow legislation**: There is no key law for determining the environmental flow downstream of a dam.

- **No habitat assessment outside of designated protected areas**: There are no specific requirements for projects impacting critical habitats outside of designated protected areas.

- **Invasive species not addressed**: The assessment and management of alien invasive species during project works and operations are insufficient.

- **Associated upstream impacts not assessed**: There are no requirements for evaluating the impacts of primary suppliers from regions with degraded or critical habitats.

- **Biological diversity policy and legislation gaps**: Despite being a party to the Convention on Biological Diversity, Nepal has yet to enact laws for the conservation and sustainable use of aquatic biodiversity.

- **Inadequate importance to aquatic biodiversity**: Policies relating to various sectors have not assigned due priority to aquatic biodiversity.

ESS 7: Indigenous Peoples

ESS 7 establishes the requirements to ensure that projects affecting indigenous peoples (IPs) and their cultural identities, practices, and customary lands take the necessary measures to address them. The objectives of this standard are to:

- Ensure that IPs do not suffer adverse impacts because of projects or, where avoidance is not possible, to minimize, mitigate, and/or compensate for such impacts.

- Design and implement projects in a way that fosters full respect for IPs' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the IPs themselves.

- Ensure that IPs receive culturally appropriate social and economic benefits and can participate actively in projects that affect them.

- Promote sustainable development benefits and opportunities for IPs in a culturally appropriate manner.

- Ensure Free, Prior, and Informed Consent (FPIC).

- Recognize, respect, and preserve the culture, knowledge, and practices of IPs where possible in a project context, and consider opportunities to adapt to changing conditions in a manner and in a time frame acceptable to them.

Nepal's Constitution recognizes the country as multi-ethnic, multilingual, and multi-cultural, committing to protect and promote unity in diversity. It provides for non-discrimination against these groups, protection of their right to language and culture, and participation in state bodies and community decisions. Nepal has also adopted the United Nations Declaration on the Rights of Indigenous Peoples and ratified the International Labor Organization Indigenous and Tribal Peoples Convention (Convention No. 169), which includes provisions for safeguarding IPs' rights.

Gaps Identified:

- **No provisions for early screening**: There are no formal screening processes to identify IPs' presence or assess potential project impacts.

- **Inadequate Social Impact Assessments (SIA)**: SIAs lack specificity for IPs, with only partial and inadequate measures in power sector policies.

- **Lack of culturally appropriate benefit sharing or mitigation strategies**: There are no detailed provisions for these.

- **Insufficient meaningful consultations**: Engagement with Indigenous communities is not mandated, leading to inadequate consultations.

- **Absence of culturally sensitive grievance mechanisms and FPIC**: Energy sector policies lack these mechanisms.

- **No provisions to prevent displacement and ensure Indigenous participation in resource management**: There are no requirements for preparing Indigenous Peoples Plans (IPPs) or disclosing project information in an accessible and timely manner.

- **Weak legal recognition of Indigenous land rights**: There is no participatory monitoring and evaluation of safeguard measures.

ESS 8: Cultural Heritage

ESS 8 aims to protect cultural heritage and encourages its broader use as an enabler of sustainable development. The objectives of this standard are to:

- Protect cultural heritage from adverse impacts of project activities and support its conservation.

- Address cultural heritage protection as an integral aspect of sustainable development.

- Apply the mitigation hierarchy to avoid and minimize adverse impacts on cultural heritage.

- Promote meaningful consultation with stakeholders regarding cultural heritage.

- Promote the equitable sharing of benefits from the use of cultural heritage.

Nepal's Constitution outlines the need to carry out studies, research works, excavation, and dissemination for the protection, promotion, and development of ancient, archaeological, and cultural heritages. Article 32 (3) guarantees that every Nepali community residing in Nepal shall have the right to preserve and promote its language, script, culture, cultural civilization, and heritage. The EPA (2019) mandates maintaining an inventory of cultural heritage and declaring environmental protection areas.

Gaps Identified:

- **Lack of assessment of intangible cultural heritage**: The NEA doesn't record and assess possible impacts of the project on intangible cultural heritages.

- **No cultural heritage plans**: The NEA does not develop a cultural heritage plan. Therefore, during construction, NEA may inform concerned government agencies and stakeholders of chance finds (as required by law), but there is no consistent approach, and the prospects of comprehensive and reliable participation and consultation with the stakeholders are not practiced.

ESS 9: Climate Change

ESS 9 sets out the requirements for managing project-related climate risks and impacts. It supports alignment with the Paris Agreement and promotes climate change mitigation and resilience. The objectives of this standard are to:

- Minimize absolute and relative greenhouse gas (GHG) emissions attributable to a project by considering alternatives and monitoring and reporting project-related GHG emissions where applicable.

- Manage project-related climate risks and contribute to enhancing climate resilience.

Climate change is a crucial consideration when managing risks and impacts on vulnerable and indigenous peoples, as well as on project worker and community health and safety. The standard requires borrowers and/or clients to undertake project-level climate risk assessments (CRA) and implement adaptation measures. Under this standard, GHG emission monitoring is an ongoing requirement if a project emits GHG over a certain threshold.

Gaps Identified:

- **No climate risk assessment and GHG monitoring at the project or operational level**: Although Nepal's banking and financial institutions follow the central bank's guidelines, climate risk assessment and GHG monitoring are not considered in NEA project construction and operations.

ESS 10: Stakeholder Engagement and Information Disclosure

ESS 10 consolidates all requirements related to stakeholder engagement, including meaningful consultation, information disclosure, and grievance mechanisms. The objectives of this standard are to:

- Establish a systematic approach to stakeholder engagement that helps borrowers and clients develop and maintain a constructive and responsive relationship with their stakeholders.

- Assess stakeholder interest and support for a project through meaningful consultation, enabling stakeholders' views to be considered in the project development process and in the implementation and monitoring of E&S performance.

- Promote and provide the means for effective and inclusive engagement with stakeholders on issues that could potentially affect them throughout the preparation and implementation phases of a project cycle.

- Ensure appropriate project information on E&S risks and impacts is disclosed to stakeholders in a timely, understandable, and accessible manner and format.

- Ensure the needs and concerns of disadvantaged or vulnerable project-affected persons are recognized and accounted for in the stakeholder engagement and information disclosure process.

- Provide stakeholders with safe, accessible, and inclusive means to raise questions, proposals, concerns, and grievances, without threat of reprisal, and ensure that borrowers and clients respond and manage them effectively.

Stakeholder identification and engagement are essential parts of project-induced E&S risk management. It is a crucial component of project planning, design, and implementation for risk identification and mitigation. It is an essential part of good governance, based on principles of transparency, accountability, non-discrimination, and access to remedy.

Gaps Identified:

- **No clear mandate for systematic stakeholder engagement**: This is particularly relevant for vulnerable groups and Indigenous Peoples (IPs). There are inadequate procedures for meaningful consultations throughout the project lifecycle.

- **No requirement for a stakeholder engagement plan**: Nepal's regulatory framework does not explicitly require projects to prepare and implement a stakeholder engagement plan to secure a social license to operate.

- **Lack of institutional capacity or guidelines**: NEA lacks institutional mechanisms and trained staff to effectively manage stakeholder engagement and grievances.

- **Grievance redress is limited and often ineffective**: In NEA projects, a formal grievance redress mechanism (GRM) is established, primarily to address issues related to compensation and asset inventory during land acquisition.

- **Information disclosure in NEA projects is weak**: The legal framework requires public hearings during EIA preparation to disclose project details, environmental and social impacts, land acquisition, resettlement, and mitigation measures.

NEA's Institutional Capacity Assessment on E&S Risk Management

285. The Nepal Electricity Authority (NEA) faces several challenges in managing environmental and social (E&S) risks and impacts in its projects. Here are the key points:

Roles and Responsibility

The Environmental and Social Studies Department (ESSD) is primarily responsible for managing E&S risks, but there is a lack of coordination with other directorates and departments within NEA. This leads to inconsistent practices across projects.

1. Coordination

There is ineffective coordination both internally within NEA and externally with government agencies, stakeholders, and affected communities. This weak coordination affects the planning, implementation, and monitoring of E&S safeguard activities.

2. Management Information System (MIS)

NEA has a weak system for maintaining databases and documents related to E&S safeguards. There is a need for a robust IT system and adequately trained staff to ensure effective monitoring and reporting.

3. Human Resources

The existing E&S-related human resources are insufficient to handle the growing number of NEA projects. There is a lack of sectoral experts, and the responsibilities for land acquisition are often assigned to administrative officers who lack the necessary skills and experience.

4. Training and Exposure

ESSD staff require professional training and exposure to emerging subjects and tools. There is limited understanding of land valuation, mitigation measures for livelihood restoration, and negotiating skills.

5. Motivation and Career Growth

While NEA provides financial incentives to ESSD staff, the lack of career growth opportunities demotivates them. There are limited vertical career paths within ESSD, affecting the ability to attract and retain experienced E&S practitioners.

6. Grievance Redress Mechanism (GRM)

NEA lacks a centralized GRM under an MIS/ME system. This function could provide enhanced visibility and accountability of issues to projects and their stakeholders.

7. Occupational and Community Health and Safety (OCHS)

There is no NEA entity that oversees OCHS issues despite rising safety concerns. There are few safety officers, and the regular OHS training mandates are not effectively implemented.

E. Conclusion and Recommendations

The Nepal Electricity Authority (NEA) is responsible for managing environmental and social risks in its operations, including transmission lines, hydro-electric, and solar power projects. NEA must comply

with national laws and policies but often falls short of citizen expectations, development partner requirements, and institutional capacity.

Key areas where NEA's practices diverge from international standards include non-universal environmental assessment screening based on project size rather than risk, limited social impact assessments, lack of a mitigation hierarchy, inadequate engagement with indigenous peoples and vulnerable groups, minimal stakeholder consultation post-EA, and insufficient cumulative impact assessments. Climate change impacts are not considered.

Labor issues include the absence of formal contracts, inadequate health and safety standards, and no worker grievance redress mechanisms. NEA projects lack labor management procedures and emergency response plans, relying on ad-hoc practices. Resource use efficiency enforcement is weak, despite comprehensive biodiversity and cultural heritage laws.

Land acquisition challenges involve reliance on eminent domain and cash compensation without alternatives or livelihood restoration. Although legal recognition exists for indigenous rights, implementation gaps persist, limiting their participation in decision-making.

Stakeholder engagement and information disclosure laws are poorly implemented, lacking provisions for ongoing engagement throughout project lifecycles. Grievance redress, transparency, and coordination within NEA and with external agencies are inadequate. E&S safeguard databases need robust IT systems and trained staff for effective monitoring.

Staffing levels and expertise are insufficient, leading to concerns about E&S safeguard quality and timeliness. Specialized training and career growth opportunities are needed to motivate and retain experienced professionals.

Overall, there are significant gaps between NEA’s mandated requirements and its capacity to meet them, necessitating an enhanced environmental and social management strategy

Annex 7: List of Development Partners Prohibited Activities

A. List of ADB's Prohibited Activities

(i) production or activities involving harmful or exploitative forms of forced labor or child labor;

(ii) production of or trade in any product or activity deemed illegal under host country laws or regulations or international instruments or subject to international phaseouts or bans, such as (a) pharmaceuticals, pesticides and herbicides, and persistent organic pollutants, ozone-depleting substances, polychlorinated biphenyls and other hazardous chemicals, wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and transboundary trade in waste or waste products;

(iii) production of or trade in weapons and munitions, including paramilitary materials;

(iv) production of or trade in alcoholic beverages, excluding beer and wine;

(v) production of or trade in tobacco;

(vi) gambling, casinos, and equivalent enterprises;

(vii) production of or trade in radioactive materials, including investment in nuclear reactors;

(viii) production of, or trade in, or use of asbestos fibers;

(ix) commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests;

(x) marine, inland and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine or freshwater biodiversity and habitats;

(xi) new coal-fired power generation and coal-fired heating plants;

(xii) coal mining, processing, storage or transportation;

(xiii) upstream or midstream oil projects; and

(xiv) natural gas exploration or drilling.

B. Exclusion list of World Bank Group

All participating financial intermediaries (PFIs) must apply the following exclusions:

- Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCBs, wildlife or products regulated under CITES.
- Production or trade in weapons and munitions.
- Production or trade in alcoholic beverages (excluding beer and wine).
- Production or trade in tobacco.
- Gambling, casinos and equivalent enterprises.
- Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded.
- Production or trade in unbonded asbestos fibers. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- Drift net fishing in the marine environment using nets in excess of 2.5 km in length.
- Production or activities involving harmful or exploitative forms of forced labor/harmful child labor.
- Commercial logging operations for use in primary tropical moist forest.
- Production or trade in wood or other forestry products other than from sustainably managed forests.

Annex 8: E&S Screening Risk Scoring Criteria

E&S Screening Risk Scoring Table

Risk Category	Low Risk	Medium Risk	Substantial Risk	High Risk
Regulatory Compliance	Full compliance, no issues	Minor regulatory concerns	Legal challenges, possible fines	Violations, litigation, shutdown risk
Environmental Impact	Minimal impact, compliance with regulations	Minor impacts require mitigation measures	Significant impact, potential regulatory scrutiny	Severe impact, potential irreversible damage to environment
Social Impact including Land Acquisition	No adverse effect on communities No land Acquisition	Minor concerns, manageable issues	Land acquisition, minor displacement,	Possible major displacement, Loss of livelihoods
IPs and Cultural Heritage	No effect on IPs and cultural heritage	Minor effect on IPs and cultural heritage but manageable	Moderate and reversible impact on Indigenous people, cultural heritage	Major impact on IPs, impact on cultural heritage
Health & Safety Risks	No safety concerns	Some risks, easily managed	Frequent incidents, high exposure	Severe hazards, possible risk to human life
Biodiversity & Ecosystem	No impact on biodiversity	Some impact, mitigation possible	Habitat loss, species impact	Critical ecosystem destruction
Climate Change & Carbon Emissions	Low emissions, no climate risk	Moderate emissions, reduction strategies in place	High emissions, no clear reduction plan	Extreme emissions, significant climate risk
Stakeholder & Community Engagement	Positive relationships, strong support	Some concerns, engagement required	Opposition from key stakeholders	Strong resistance, potential protests, reputational damage

Note: Assign a score (1-8) to each category based on risk level.
Total risk score = Sum of all category scores.

Risk Classification

Risk rating	Score	Definition
Low	8-16	No or insignificant adverse risks or impacts. No particular management plans required. ESCOP might be needed.
Moderate	17-32	Moderate adverse risks and impacts and risks are limited to the project site and manageable with standard solutions and state-of-the-art technology as part of the project's BES/ESMP, and SEP.
Substantial	33-48	Projects with substantial risks and impacts are those where impacts occur in single areas that are at higher risk than Moderate risk projects but not as diverse and unprecedented as for High-risk projects. Example safeguard instruments that could be required include: ESIA/EIA/IEE, SEP and specific management Plan
High	49-64	Projects with high adverse risks and impacts that are diverse, irreversible and unprecedented. The impacts may extend beyond the project site, the areas of construction and/or the direct project area and require specific management measures that go beyond standard solutions and state-of-the-art technologies. Example safeguard instruments that could be required include: ESIA/EIA, RAP, BMP, IPP, CHMP, SEP.

Annex 9: Outline of Environmental and Social Impact Assessment

A. Context

This document guides conducting an Environmental and Social Impact Assessment (ESA) and preparing its report. It also aids in drafting the ESA Terms of Reference. ESAs apply to high, substantial, or moderate risk projects identified by the Environmental and Social Management System (ESMS). The goal is to evaluate potential adverse impacts and develop mitigation measures documented in an Environmental and Social Management Plan (ESMP).

The ESA's scope and depth depend on the issues' nature, complexity, and significance, as determined by the ESMS screening. For a full ESA, a scoping study involving stakeholders confirms risks, sets priorities, and specifies assessment types required. Key elements, methodology, and outputs of a scoping study are detailed in the ESMS Guidance Note on Scoping.

B. Key elements of an ESA and an ESA report

The key elements of an ESA and its report are described in this section. These elements must be thoroughly covered by a full ESA for a high-risk project. A partial ESA does not require as much background and baseline data as a full ESA; the elements usually not covered in a partial ESA are marked with an asterisk. The order and way the information is presented in an ESA report should be based on this outline.

i. Non-technical summary

Summarise significant impacts in a way that can be easily understood by a non-technical audience, in particular local stakeholders. The summary includes how the identified impacts should be managed and points out any outstanding issues that require further action.

ii. Project description

Concisely describe the main parameters of the proposed project, including:

- The executing entities of the project (e.g. main project lead as well as project partners) and their respective roles in the project
- The project’s geographic location, preferably illustrated with appropriate maps
- Summary of the project (project objective(s), expected results/outcomes, outputs and main activities)
- Implementation arrangements.

iii. Analysis of policy, legal and administrative framework*

Describe the policy, legal, and administrative framework of the project, highlighting relevant environmental and social laws and regulations. Include requirements for environmental/social impact assessments and host country obligations under international law. Explain any co-financing partners' requirements and consider legal frameworks for gender equality. Identify any potential compliance issues.

iv. Stakeholder identification and analysis

The purpose of the stakeholder identification and analysis is to understand potential impacts on stakeholders and to clarify who should be involved in the ESA process and how. This is done by listing all relevant stakeholders – based on any existing stakeholder analysis developed during the project design process and on general knowledge about the project context and its main stakeholders – and elaborating the following:

- stakeholders' interests in and expectations from the project;
- how they might influence the project (positively or negatively);
- a first appraisal or estimation of how their livelihoods could be impacted by the project (positively or negatively); and
- how they should be involved in the ESA based on the information in the three items above.

Stakeholders should be disaggregated between men and women where relevant and feasible. It is useful to present the key findings of the stakeholder analysis in a matrix. The stakeholder analysis is considered a work in progress that should be adjusted as more information becomes available during the ESA process and beyond.

v. Environmental and social baseline*

Describe and analyse the environmental and social context of the project, focusing on the immediate site and related impacts to inform decisions about design, operation, or mitigation. Use secondary data for general context and collect primary data at the site for specific insights.

This section of the ESA report establishes the baseline of current environmental and social conditions to predict and measure project impacts. For moderate-risk projects needing only a partial ESA, it also confirms potential impacts identified during ESMS screening.

The baseline analysis scope depends on the project's nature and issues from the screening, covering physical, biological, socio-economic, and cultural aspects. Refer to the ESMS Guidance Note on Social Impact Assessment for additional guidance.

vi. Assessment of environmental and social impacts

This step is the heart of the ESA; it itemizes and describes the identified impacts, makes predictions in terms of their probability and assesses their significance. In accordance with the ESMS Policy Framework, the assessment should give particular attention to impacts related to the ESMS standards such as adverse impacts on people's livelihood through access restrictions or resettlement, on indigenous peoples, on cultural heritage or on biodiversity. However, thematic coverage of the ESMS also involves other potential social impacts including impacts on women or vulnerable groups or risks triggered by the project failing to take climate change effects into consideration. While the ESA's terms of reference already establish the main impacts to be covered by the assessment – based on the screening (or scoping for high-risk projects) – it is important to understand that an ESA is an iterative process during which new and more detailed information may be obtained and additional significant issues might come up (e.g., as part of the baseline analysis). When analysing the risks not only direct impacts should be taken into consideration but also indirect impacts such as inadvertent knock-on effects or cumulative effects that materialise through interaction with other developments, impacts occurring at the project site or within the project's wider area of influence and impacts triggered over time.

Project impacts can be analysed using a range of methods from simple qualitative analysis to detailed quantitative surveys or modelling. The data collection methods and analytical tools used, and the depth of analysis should be commensurate with the type and significance of the impacts, it should allow rigorous assessment of the significant impacts using qualitative and, to the extent possible, also quantitative methods. The report should describe the methods chosen for data collection and analysis and the rational for the choice of method; it should further describe the quality of available data and, where applicable, explain key data gaps and uncertainties associated with predictions.

Participatory research and assessment tools should be employed wherever sensible to increase stakeholder's understanding of the project, provide opportunity for raising issues and enable participation of affected groups in the identification of mitigation measures, as discussed in section 9.

Understanding the significance of risks is important for prioritising the need for mitigation measures. For evaluating significance, it is important to consider the likelihood that a given risk event is expected to occur and the magnitude of the expected impacts (consequence). The latter refers to the extent to

which a risk event might negatively affect environmental or social receptors. This includes considerations of the following criteria:

- sensitivity of the receptor,
- severity of impacts,
- expected duration and scale and
- whether or not the impact is reversible.

Assessing significance of risks also takes into consideration whether there are known, acceptable and readily available good practices to address those impacts and whether the executing entities and/or main stakeholders have experience applying such measures.

vii. Analysis of alternatives*

The purpose of the analysis of alternatives is to identify other options, including not implementing the project, to achieve the project objectives and compare their impacts with the original proposal. This step is required only for high-risk projects where the identified impacts are very significant.

The analysis systematically compares feasible, less adverse, alternative technologies, designs, operations and sites – including the "no project" option – to the proposed project in terms of:

- their effectiveness of achieving the project objectives as well as potential trade-offs;
- their potential environmental and social impacts;
- the feasibility of mitigating these impacts;
- operational requirements and their suitability under local conditions;
- their institutional, training, and monitoring requirements;
- their estimated cost-effectiveness; and
- their conformity to existing policies, plans, laws and regulations.

The analysis should recommend the preferred alternative and state why it was chosen.

viii. Environmental and social management plan (ESMP)

A main output of the ESA process is a strategy for managing risks and mitigating impacts. The identification of mitigation measures is done in consultation with affected groups and is guided by the mitigation hierarchy. The mitigation hierarchy implies that all reasonable attempts must first be made to avoid negative social or environmental impacts. If avoidance is not possible without challenging the conservation objective of the project, measures should be taken to minimise the impacts to acceptable levels and address remaining residual impacts with adequate and fair compensation measures.

The risk management strategy is documented in an Environmental and Social Management Plan (ESMP) that describes: the mitigation measures developed during the ESA, an implementation schedule and required resources and responsibilities. The technical and operational feasibility, cultural adequacy and sustainability of proposed measures must be demonstrated as well as requirements for capacity building and institutional strengthening, where relevant. The ESMP should also indicate how the measures designed to avoid impacts will be monitored for effectiveness. The guidance notes for developing the ESMP provides further instructions and includes templates for the ESMP and for monitoring the plan.

ix. Results of stakeholder consultations

Stakeholder engagement is a key principle of the ESMS and an important procedural tool for a successful ESA. It improves understanding of local conditions and stakeholders' concerns and is essential for identifying effective strategies for mitigating negative impacts. Involving affected groups in decision making gives them more confidence and security, improves the legitimacy of the project and helps build constructive relationships among stakeholders.

The ESMS Manual defines requirements for stakeholder engagement by establishing minimum

provisions for disclosure and consultation during the steps of the project cycle. These provisions are particularly relevant for the ESA process; the provisions for consultation and disclosure are more stringent for high-risk projects (full ESA) than for moderate-risk projects (partial ESA).Tables 5 and 6 in the ESMS Manual synthesise these requirements.

During the ESA, consultations should concentrate on potentially affected groups, indigenous peoples and civil society organizations; the stakeholder analysis supports the decision of whom to consult. The consultation process must be culturally appropriate, non-discriminatory and gender sensitive. It should assure that all people whose lives might be affected by the project are properly consulted to verify and assess the significance of impacts and that all affected groups are provided the opportunity to participate in the development of mitigation measures.

The intensity or depth of stakeholder engagement should be appropriate to the complexity of the project and the significance of the identified risks and tailored to individual groups. The general logic of stakeholder engagement that should be followed is described in Figure 3 in the ESMS Manual. It is important to be mindful of the resources and time required of stakeholders. The consultation process is best scheduled in iterative steps, first seeking initial inputs, then feed-back on first assessment results and suggestions for mitigation actions and concluding with a final stakeholder meeting to gather feed-back on the draft of the ESA report, the ESMP and other action plans, as relevant.

If the Standard on Involuntary Resettlement and Access Restrictions or the Standard on Indigenous Peoples are triggered, consultations should fully adhere to the Free, Prior and Informed Consent Principle. Guidance is provided in the ESMS Manual and in a separate guidance note.

The final ESA report should document the results of the consultations carried out with stakeholders and project-affected groups and provide a summary of the concerns raised and an explanation of how these results have been addressed in the ESA and the ESMP. The description should specify how women were included in the consultation, taking into consideration their gender-specific knowledge, roles, responsibilities and potential impacts.

C. Other items to be specified in the terms of reference for an ESA

The actual terms of reference for an ESA must be tailored to each project as the scope and depth of the assessment depend on the nature, complexity and importance of the issues emerging from the ESMS screening. For high-risk projects, the scope of the ESA will be determined in detail by the scoping study preceding the ESA.

The terms of reference for an ESA usually include the items listed below. The terms of reference for moderate-risk projects are less comprehensive than those for high-risk projects; hence elements marked with an asterisk are usually not required for a partial ESA.

- A summary of the main project features
- A list of applicable national and local ESA requirements, where available and relevant*
- A list of the key issues that emerged from the ESMS screening and scoping to be analysed in the ESA
- A description of the required elements of the ESA (see section II, 3-9) and specification of the content of any additional specialist studies (if applicable) to be undertaken as part of the ESA
- Provision of methodological guidance (if applicable) for the overall ESA and specialist studies (e.g., gender responsive analysis)
- Specification of the type of environmental and social expertise required by the ESA expert/team
- A preliminary list of feasible project alternatives including a “no project” option and requirements for their assessment*
- Specification of types of required consultations with affected people, communities and other parties including final stakeholder meeting(s) for gathering views on the draft ESA and ESMP
- The requirement for preparing an ESA report and other documents or action plans (as needed) and for rigorously indicating accuracy, reliability and sources of the data used
- A budget and schedule for the ESA providing sufficient time and funds for effective stakeholder

consultation.

Carrying out an ESA requires a technical team with appropriate qualifications and experience in qualitative and quantitative research techniques and familiarity with the thematic and regional or local context; the team should have experience with participatory design and assessment methodologies, with gender analysis and gender-responsive project design and, where relevant, with indigenous peoples' issues.

Annex 10: Outline of ESMP

Components of the ESMP

An Environmental and Social Management Plan (ESMP) documents the project's risk management strategy. It serves as an "Umbrella Document" that integrates the findings of all impact studies carried out during the design phase, the plans and other provisions for complying with the requirements of the Standards that were triggered as well as country- and site-specific information relevant for the project's risk management strategy. The ESMP will become an integral part of the project proposal.

The ESMP has the following content:

a) Projects description including design and monitoring framework and project activities, location and geographic extent of the project;

b) Brief reference to the legal framework in the host country relevant for environmental and social management and how the projects ensures compliance;

c) Complete list of identified negative effects that specific project activities may cause and their significance;

d) Planned measures to avoid adverse environmental and/or social impacts, to minimise them to acceptable levels or to compensate for them; including responsibilities (staffing) and schedule for implementing the mitigation measures, their technical feasibility, cultural appropriateness, expected effectiveness in providing mitigation to all affected groups;

e) Reference to plans required by the Standards (e.g. Indigenous Peoples Plan, Action Plan Access Restrictions etc.) and whether mitigation measures have been included or not in the ESMP;

f) Cost estimates for the proposed mitigation measures and for ensuring compliance, to be included in the budget of the project proposal;

g) Description of the executing entities' capacity to implement the ESMP; where needed, provide for capacity building measures (to be included in the ESMP budget).

For each mitigation measure the operational details need to be summarised in form of a table (see Template 1). A good synchronization with the project's overall implementation plan and its monitoring and reporting cycle is critical.

If a mitigation measure is already part of the project's main plan, it should still be included in the ESMP. This provides an overall view of the mitigation strategy and allows checking measures against impacts. It ensures the measures are sufficient, feasible, and sustainable. To avoid repetition with the project's plan, only enter the activity codes (see Template 1 footnote).

ESMP Monitoring and Supervision

The ESMP must be monitored annually to track progress on agreed mitigation measures using Template 2 from the Annex. The first two columns are from the ESMP; each measure should indicate if it's on schedule, delayed, or completed, with reasons and solutions for any delays.

Effectiveness of the mitigation measures also needs monitoring. Template 2 offers a simple format, but complex measures require a detailed plan including indicators, baselines, and targets (see Template 3). The executing agency should use observations and stakeholder consultations to judge effectiveness and find synergies with the project's monitoring plan. Results go in the right column.

Annual monitoring should identify new risks and add necessary mitigation measures to the ESMP (Template 1, Annex). These updates should be reported during annual monitoring. The implementing

agency reviews the annual ESMP Progress Monitoring Table as part of periodic project supervision missions.

Template 1: Environmental and Social Management Plan (ESMP)		
ESMS Standards	**Triggered**	**Main issues, how they will be addressed and whether a stand-alone plan is required** (e.g. Indigenous Peoples Pan, Process Framework etc.)
Involuntary Resettlement and Access Restrictions	☐ yes ☐ no ☐ TBD	
Indigenous Peoples	☐ yes ☐ no ☐ TBD	
Cultural Heritage	☐ yes ☐ no ☐ TBD	
Biodiversity Conservation and Sustainable Use Natural Resources	☐ yes ☐ no ☐ TBD	

	Activities to comply with ESMS policy and provisions	**Costs**	**Implementation Responsibility**	**Schedule**
Disclosure Requirements				
Grievance Mechanism				
Gender Mainstreaming				
Stakeholder Engagement				

Key Social and Environmental Impacts and related Mitigation Measures					
Social & Environmental Impacts[41]	**Mitigation measures[42]**	**Feasibility, effectiveness and sustainability[43]**	**Costs**	**Implementation Responsibility**	**Schedule**

[41] If Standards are triggered and it has been decided that the mitigation measures are not presented in form of a stand-alone plan (e.g. IPP, Process Framework etc.), the measures are described in this table

[42] Where mitigation measures have already been conceptualized as project activities, only the codes of the activities need to be entered (e.g. "-> see Activity 1.2.3"); other columns are not applicable to avoid repetition.

[43] The ESMP has to confirm that proposed mitigation measures are feasible, that they are effective in providing mitigation for all affected groups and sustainable. In this column either describe how feasibility is confirmed or put √ to confirm that feasibility has already been proven elsewhere and indicate where to find evidence.

New ESMS risks that have emerged					

Note: The progress of implementing mitigation measures should be color-coded in column C: Green = On Schedule/ Ahead of Schedule/ Completed, Orange = Slightly Delayed, Red = Delayed	ON SCHEDULE / AHEAD OF SCHEDULE/ COMPLETED	SLIGHTLY DELAYED	MAYOR DELAYS/ ISSUES

Disclosure		

Template 2: ESMP Monitoring

Period covered by the report:

ESMS Standards	**Describe the progress of implementing the required tools** (Indigenous Peoples Plan, Process Framework etc.):

Social & Environmental Impacts[44]	**Mitigation measures**	**Color coding**	**Describe status of completion,** suggest solutions where problems are encountered	**Early judgement: Does this measure seem effective?**
New ESMS risks that have emerged				

Other ESMS provisions	**Describe status of completion and evidence**	**Outstanding action and timing**
Disclosure		
Grievance Mechanism		
Gender Mainstreaming		
Stakeholder Engagement		

TO BE COMPLETED BY IMPLEMENTING AGENCY	**Date/Name of reviewer:**
ESMP monitoring - main findings:	**Status ESMP** **☐ on schedule** **☐ slightly delayed**

[44] Column A and B are copied from the ESMP.

	☐ **major delays/issues**

Template 3: Plan for Monitoring Effectiveness of ESMP *TO BE COMPLETED BY EXECUTING AGENCY*					
Mitigation measures	**Indicators** *proving effectiveness of avoidance or reducing impacts*[45]	**Baseline**	**Monitoring methodology**	**Target (mid-term)**	**Target (end of project)**
A	B	C	D	E	F
New ESMS risks that have emerged					

[45] Identify one indicator for each mitigation measure. Use the same numbering as for mitigation measures as in Table 1 and use corresponding number for indicators; e.g., measure 1 (M1) would be monitored by indicator 1 (Ind1).

Annex 11: Labor Management Procedures

1. INTRODUCTION

This section provides a brief overview of the project description, its components, and the key activities involved.

Objectives of the LMP

The purpose of the LMP is to facilitate planning and implementation of the project. The LMP identify the main labor requirements and risks associated with the project and help NEA to determine the resources necessary to address project labor issues. The LMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout development and implementation of the project.

This LMP sets out the approach and mitigation measures that will be adopted to address risks and impacts related to workers and labor management of the project. It also sets out a mechanism by which workers on this project can lodge work-related grievances. The LMP is prepared to meet the objectives and requirements of national labor management regulations (i.e., Labor Act, 2017 and Labor Rule, 2018) and in compliance with DP's requirements.

Scope of the LMP

This LMP applies to the following types of workers and will be used to manage risks and impacts related to such workers who are directly holding technical, managerial, and other responsibilities under the project.

1. Direct Workers: People employed or engaged directly by NEA & its projects to work specifically on project activities
2. Contracted Workers: People employed or engaged by contractors and other third parties to perform core functions related to the project, regardless of location
3. Primary Supply Workers: People employed or engaged by primary suppliers associated with the NEA projects

This LMP is relevant for the duration of the project and applies to the above workers regardless of their contract type: full-time, part-time, temporary, seasonal, or migrant workers. For contracted workers, NEA and its project management will ensure that contractors prepare separate labor management plan for larger work in line with this LMP. For smaller contracts, the Project management may incorporate specific labor-related requirements and procedures into the contracts as part of contractors' legal obligations.

2. OVERVIEW OF LABOR USE ON THE PROJECT

This section describes the following, based on available information:

Number of Project Workers: The total number of workers to be employed on the project, and the different types of workers: direct workers and contracted workers. Where numbers are not yet firm, an estimate should be provided.

Characteristics of Project Workers: To the extent possible, a broad description and an indication of the likely characteristics of the project workers e.g. local workers, national or international migrants, female workers, workers between the minimum age and 18.

Timing of Labor Requirements: The timing and sequencing of labor requirements in terms of numbers, locations, types of jobs and skills required.

Contracted Workers: The anticipated or known contracting structure for the project, with numbers and types of contractors/subcontractors and the likely number of project workers to be employed or engaged by each contractor/subcontractor. If it is likely that project workers will be engaged through brokers, intermediaries or agents, this should be noted together with an estimate how many workers are expected to be recruited in this way.

Migrant Workers: If it is likely that migrant workers (either domestic or international) are expected to work on the project, this should be noted and details provided.

3. ASSESSMENT OF KEY POTENTIAL LABOR RISKS

This section describes the following, based on available information:

Project activities: The type and location of the project, and the different activities the project workers will carry out.

Key Labor Risks: The key labor risks which may be associated with the project. These could include, for example:

- The conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials
- Likely incidents of child labor or forced labor, with reference to the sector or locality
- Likely presence of migrants or seasonal workers
- Risk of epidemic and communicable diseases
- Risks of labor influx
- Risk of sexual exploitation and abuse/sexual harassment (SEA/SH) & gender-based violence
- Possible accidents or emergencies, with reference to the sector or locality
- General understanding and implementation of occupational health and safety requirements
- Risk of child and forced labors

4. BRIEF OVERVIEW OF LABOR LEGISLATION: TERMS AND CONDITIONS

This section sets out the ***key aspects*** of national labor legislation with regards to terms and conditions of work, and how national legislation applies to different categories of workers identified in Section 1. The overview focuses on legislation which relates to the items such as wages, deductions and benefits.

5. BRIEF OVERVIEW OF LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY

This section sets out the ***key aspects*** of the national labor legislation with regards to occupational health and safety, and how national legislation applies to the different categories of workers identified in Section 1. The overview focuses on legislation which relates to the items set out in DP's requirements of Labor and working conditions.

6. RESPONSIBLE STAFF

This section identifies the functions and/or individuals within the project responsible for (as relevant):

- engagement and management of project workers
- engagement and management of contractors/subcontractors
- occupational health and safety (OHS)
- training of workers
- addressing worker grievances

In some cases, this section will identify functions and/or individuals from contractors or subcontractors, particularly in projects where project workers are employed by third parties.

7. POLICIES AND PROCEDURES

F. This section sets out information on OHS, reporting and monitoring and other general project policies. Where relevant, it identifies applicable national legislation.

Where significant safety risks have been identified as part of Section 2, this section outlines how these will be addressed. Where the risk of forced labor and child labor have been identified, this section outlines how these will be addressed to comply with national labor management regulations and DP's requirements. If NEA has its own stand-alone policies or procedures, these can be referenced or annexed to the LMP, together with any other supporting documentation.

8. AGE OF EMPLOYMENT

This section sets out details regarding:

- The minimum age for employment on the project
- The process that will be followed to verify the age of project workers
- The procedure that will be followed if underage workers are found working on the project
- The procedure for conducting risk assessments for workers aged between the minimum age and 18

9. TERMS AND CONDITIONS

This section sets out details regarding:

- Specific wages, hours and other provisions that apply to the project
- Maximum number of hours that can be worked on the project
- Any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions
- Other specific terms and conditions

10. GRIEVANCE MECHANISM

This section sets out details of the grievance mechanism that will be provided for direct and contracted workers and describes the way in which these workers will be made aware of the mechanism.

11. CONTRACTOR MANAGEMENT

This section describes the contractual provision that the project requires that contractors monitor, keep records and report on terms and conditions related to labor management. Contractors and sub-contractors must provide workers with evidence of all payments made, including social security benefits, pension contributions or other entitlements regardless of the worker being engaged on a fixed term contract, full-time, part-time, or temporary. In addition, while selecting the contractor the experiences of the contractors in managing and implementing ESMPs which cover labor related issues as well will be evaluated.

The contractual provisions that will be put in place relating to contractors for the management of labor issues, including occupational health and safety and the procedure for managing and monitoring the performance of contractors.

12. PRIMARY SUPPLY WORKERS

Where a significant risk of child or forced labor or serious safety issues in relation to primary suppliers has been identified, this section sets out the procedure for monitoring and reporting on primary supply workers.

Annex 12: OHS Plan

A. Management Commitment to Occupational Health Safety (OHS)

1. Goals for OHS Plan:

- Develop, implement, and maintain a safe workplace for our employees consistent with all applicable national regulations
- Consistently improve the safety program to minimize incidents, therefore ensuring employees' long-term safety and wellness.

2. Employer Responsibilities

To provide employees with a workplace free of hazards that may cause illness or serious physical harm.
To comply with standards, rules, and regulations

- Allow employees free access to tools and equipment necessary to do a job safely.
- Provide employees with training/orientation on specific safety issues and equipment.
- Conduct regular inspections.
- Following up after safety incidents with thorough accident investigations, correcting problems and post-accident employee training.
- Recognize employees with the best OHS practices.

3. Employee Responsibilities

- Handle equipment and work processes in accordance with established procedures and documented protocols.
- Report any unsafe conditions, defects in equipment, or injuries to management immediately.
- Complying with all management instructions for safe conduct.
- Attend OHS related trainings/orientations and practice drills.
- Obtain permission to operate equipment.
- Never participate in horseplay, scuffling, and other acts that endanger the safety or well-being of the team.
- Not report to work under the influence of alcohol and/or drugs or during illness.

4. Employee Injury and Illness Reporting

All injuries must be reported to the immediate supervisor or Emergency Response Team.

- Location of First-aid box and fire extinguisher :
- Emergency contact number :
- Emergency health centre location:
- Evacuation location:

Report any hazard to:
Supervisor's Name:
Contact No.:
After hours/weekends:

5. Incident Investigation

In an emergency situation, **dial …** immediately

- All injuries and illnesses should be reported, no matter how large or small.

- Fill up incident reporting Form.
- Document the injury/illness completely while doing a thorough root cause analysis of the incident so that corrective action can be determined to prevent future incidents.
- Part of the safety corrections may include employee orientation and counselling to correct unsafe behaviours, prevent injuries, and improve safety.

B. Hazard Identification and Assessment

1. Information available in the workplace may include:

- Equipment and machinery operating manuals.
- Material Safety Data Sheets (MSDS)
- Records of previous injuries and illnesses
- Patterns/trends of frequently occurring injuries and illnesses
- Existing safety and health programs, such as tagout, confined spaces, process safety management, personal protective equipment etc
- Input from workers

2. General Safety Programs

- Confined space entry
- Driving safety
- Electrical safety (wiring methods, components and equipment, electrical system design)
- Emergency Action Plan
- Ergonomics (scientific study of people and their working environment)
- Fall protection
- Fire safety

3. Personal Protective Equipment

All personal protective equipment (PPE) and tools to safely perform the work will be provided to employees and properly maintained in accordance with manufacturer guidelines.

Organization's PPE plan – use of appropriate PPE

All employees will be trained on the personal protective equipment that is required to do their jobs effectively. The Company will review any employee feedback on the use of this equipment and potential improvements that can be made.

All employees will be provided with safety vests and safety hard hats. The employees will also be wearing steel-toe boots within the construction premises. Safety harnesses will also be provided for work above the ground and in elevated areas. Safety gloves and glasses will be worn at all times.

4. Hazard Prevention and Control

Using the following standard methods:

- Safe Work Practices
- Engineering Control
- Training
- Enforcement
- Personal Protective Equipment
- Administrative Control
- Preventive Maintenance

5. Work Place Environment

- Light
- Temperature
- Ventilation
- Sound
- Working space Cleanliness
- Garbage Management
- Provision of Drinking Water
- Canteen
- Toilet Facility
- Resting time and resting place
- Safety provision in workplace

6. Communication

Standard methods for the communication with employees:

- Group orientation/individual induction
- Posters/signage/forms/formats
- Regular Meetings on OHS
- Safety suggestion box
- Online forms
- Hotline

C. Training and Education

Safety training will be provided for employees:

- During new hire on boarding.
- When beginning new job assignments.
- When cross training on new types of machinery/equipment.
- When new substances, processes, procedures, or equipment are introduced to the workplace and represent a new hazard.
- Periodically, in the form of refresher training (this may be following a near miss or incident, which can be required).

The purpose of training program is to provide employees with:

- Knowledge and skills needed to do their work safely and avoid creating hazards that could place themselves or others at risk.
- Provide awareness and understanding of workplace hazards and how to identify, report, and control them.
- Specialized training, when their work involves unique hazards.

D. Program Evaluation and Improvement

- Verify that the core elements of the program have been fully implemented.
- Ensure that the following key processes are in place and operating :
    - Reporting injuries, illnesses, incidents, hazards, and concerns.
    - Conducting workplace inspections and incident investigations.
    - Tracking progress in controlling identified hazards and ensuring that hazard control measures remain effective and is completed promptly.

    - Collecting and reporting any data needed to monitor progress and performance.
- Review the results of any compliance audits to confirm that any program shortcomings are being identified and that actions are being taken that will prevent recurrence.
- Review and update plans/processes based on the company's loss history.

The person tasked with the overall responsibility to evaluate the Company's safety program and processes is:

Name:
Contact Information:

Annex 13: Emergency Preparedness and Response Plan

Types of Incidents, Severity and Level of Response

Types of Incidents	Severity	Level of Response
Serious injury or medical emergency Fire or explosion Chemical spill Vandalism and other threats Others	Level 1 – Minor: e.g, localized fire Level 2 – Serious: e.g, containable fire Level 3 – Severe: e.g, serious fire	**Level 1** ● can be dealt with by the person identifying the problem ● supervisor should be informed and the incident formally logged ● do not involve plant evacuation or Emergency Response Team (ERT) **Level 2** ● Immediate action should be taken ● the person identifying the problem call Security to summon ERT assistance ● ERT takes necessary emergency actions ● May involve plant evacuation **Level 3** ● Immediate action should be taken ● the person identifying the problem call Security to summon ERT assistance ● ERT takes necessary emergency actions ● Must involve plant evacuation and Emergency Response Team

ERT – Emergency Response Team

1. The Emergency Organization

Operating Personnel	ERT	External Services	Others
Problem Identifier Supervisor	Incident controller First Aiders Fire checkers Others, as required	Ambulance Fire Medical Health & Safety Security	ESS specialist Site in charge

2. Emergency Response Equipment

Emergency Response Equipment	Location	Capability functions	Inspection frequency
Smoke Purge Generator	Utilities	To Extract Smoke To power in emergency	Monthly and quarterly
Fire alarm	Reception and plant rooms	To audibly alert all personnel of the presences of a Fire or Smoke	Weekly
Spill kits	Security	To contain potential local leaks	Monthly

Radio	Individually held and Reception	To ensure clear open communication in event of emergency	Weekly
Fire Extinguishers	Plant wide	To provide local, portable extinguishers for the suppression of a small fire	Annual
First Aid Kits	Security	To Supply Dressing/Burn Material	Weekly

3. Training

To	**On what**
Employees	Emergency response and evacuation
Contractors	Emergency response and evacuation
Visitors	Emergency response and evacuation
Emergency Response Team	Emergency response procedure Basic fire response procedure Chemical Spill
First aiders	First aid
Security	Call response and dealing with external threat
Incident controller	Incident control

4. Drill and communication – *should be taken annually*

5. Incident Response

Personal Injury/Medical Emergency			
Instructions for all employees and contractors	**Instruction for First Aid Personnel**	**Instruction for Supervisors**	**structions for Security**
If incident involves personal injury - remove the hazard if safe to do so	On instruction from Security or Incident Controller, proceed to scene of injured personnel	Liaise with First Aider and find out what further medical intervention is required.	Ask caller to **Remain Calm**
General Site Evacuation			
should make safe any equipment you are using if safe to do so and immediately leave the building by the nearest emergency exit Proceed to your designated Assembly Point			
Fire			
If trapped - Close as many doors as			Receive emergency call Fire alarm activation

possible between you and the fire In case of smoke - Stay as low as possible			Sprinkler water flow alarm
Chemical spill			
Others:			
Instructions for ● Emergency Response Team ● Others			

6. Incident Report Checklist

A. Attendance		
n	**Present**	**Signature**
Fire checker		
B. Notification		
	Notified	**Response**
Ambulance	Yes/No	Yes/No
Fire brigade		
C. Responsibilities		
Security	Security guard	nsure no authorized entry

7. Directory of Emergency Contacts

Name	Organization	Contact Address	Contact No.
Mr/Mrs	Security		
Dr.	Physician		
……. Hospital	Hospital		
	Fire Brigade		
	Ambulance		
	Ward Office – Ward No. …, …. Municipality Ward Office – Ward No. …., …… Municipality		
	E&S Specialist		
	Emergency Response Team		
	Contractor		

Annex 14: Resettlement Impact Screening Checklist

Potential Impact	Yes	No	Not Known	Remarks
Will there be land acquisition? Is land acquisition confirmed and known?				
If confirmed, provide the details (in the remark column) of land to be acquired (Public, private, forest or temporary, permanent)				
Is the ownership status and current usage of land to be acquired confirmed? (provide details in remark column)				
Will the project result in involuntary resettlement of individuals or families?				
Will there loss of shelter and residential due to land acquisition				
Will there be loss of agricultural and other productive assets due to land acquisition				
Will there be losses of crops, tree, and fixed assets due to land acquisition				
Will there be loss of income sources and means of livelihood due to land acquisition				
Involuntary restriction on land use or on access to common resources				
Will people be prohibited from using their daily economic resources (such as fishing sites, economic forests, planting land)?				
Will people be restricted to access natural resources, commercial facilities and services?				
If land use is changed, will it have in adverse impact on social and economic activities				
Will access to land and resources owned by the community or by the state be restricted				
Information on Displaced persons				
Any estimate of the likely number of persons that will be displaced by the project Yes No If yes, approximately how many				
Aare any of them poor, female headed of households or vulnerable to poverty risk? Yes No				
Are any displaced persons from indigenous or ethnic minority groups? Yes No				

G. Annex Valuation Approach of Affected Assets

286. All assets that will be affected, as identified by the census survey teams, will be properly recorded and verified in the presence of the concerned persons or owners of the impacted assets. During this process, the assets to be impacted will be carefully accessed by technical experts, and measurement of such assets will be taken with full consent from asset owners to ensure scientific methodology and preciseness in computing the compensation amount. The detailed survey asset information will be electronically recorded. The valuation of affected assets will be undertaken in coordination with the district-level Compensation Determination Committees (CDCs). The concerned NEA project team will make efforts to record the geo-references of the said assets (land, structures) by using a Global Positioning System (GPS) to ensure proper electronic recording of each asset to be affected.

The methods of valuation for verifying the replacement for each type of losses, which will be carried out by the CDC, are, but not limited to, the following:

Land:

- Recent compensation rates paid by nearby projects;
- Land value based on market rate; and
- District Land and Revenue Office (DLRO) land rate (fixed annual valuations depending on land category/type)
- Determine whether the established rates are sufficient or not to purchase the same quality and quantity of land in the similar location.

Structures:

- Evaluate whether the compensation for the structures will enable APs to rebuild their affected structures by consulting landowners, based in an inventory of
  - (i) types of structures, size, stories, rooms, land area similar location and nature of structure, materials used and the cost of various materials,
  - (ii) Who built the structures (AP or Contractor) and whether will be used or not.

- Obtain cost estimates by consulting at least three local/regional contractors and suppliers in order to:
  - (iii) Identify local/typical cost of materials and labour transportation cost,
  - (iv) Identify cost of different types of houses according to Categories,
  - (v) Compare prices with those prevailing in the district.

- During valuation of structures, depreciation (i.e., the age or current condition of the structure) will not be deducted when determining the compensation amount for structures. The compensation amount is therefore an estimate of the cost of replacement of the Project-affected structure, as new.

Crops and Production Trees:

The approach to determining the valuation rates for crops, trees, and grasses / herbs / fodder also adheres to the concept of replacement cost in considering both market values and transactions costs. The compensation will be defined based on district rates determined by the concerned competent authorities which are equivalent to the full replacement cost.

Valuation of Communal/Customary Land: The valuation of communal land may require consideration of non-market value, particularly in relation to identity construction (symbol of the

source of identity, prestige and safety net). The value of communal land may be determined based on the sustainable income that can be drawn from it or by comparing it with the value of a similar lifestyle and income provided by registered land" (*Source: Valuation of Unregistered Land: a Practice Manual, United Nations Human Settlements Program, UN-Habitat (2021)*

Valuation of Unregistered Lands: Unregistered land can be valued based on its current use, market conditions, and potential for future development. It is usually valued considering local customs, historical land tenure practices, and the economic value derived from the land's use. Additionally, compensation should reflect the social, cultural, and environmental value of the land, ensuring fairness for communities relying on unregistered land rights. (Source: Valuation of Unregistered Land: Policy Guide, United Nations Human Settlements Program, UN-Habitat, 2018)

Assessment of the Replacement Value of the Unregistered/ Customary Lands

Generate a list of resources that community members get from the common land. Get community members to brainstorm all the main activities or uses and all the natural resources that can be found on the land. Select 7 to 10 most used resources that every HH gathers daily or weekly.

Determine the unit of measurement for each resource. To agree on a common unit of measurement (e.g., a kilo or a bundle), ask people how the resource is usually sold or bought in the market. Determine how many units are used annually by a typical family.

Estimate the total cost per year for the whole community. Ask the community how many families/ HHs live are there in the community and use the common areas, to estimate the total cost for the entire community to replace the resources it currently gets from its common land. It should be a surprisingly large number - and it is likely still a low estimate as other resources and uses that are not included.

Reflect. Ask community members to envision what their lives would be like if they no longer had access to their community land: where they would get firewood, wild fruit, etc., how they would earn money to buy items from the market; and whether, after knowing the value of what they get from the community land, they would consider selling or renting it, and at what price.

See World Bank Report "Valuation and Compensation of Unregistered and Customary Land" https://openknowledge.worldbank.org/server/api/core/bitstreams/f3291e7b-89b1-4c32-9959-3c3eb97e5ea0/content

Annex 16: Guidance to Prepare Land Acquisition and Resettlement Action Plan (LARAP)

A Land Acquisition and Resettlement Action Plan (LARAP) is a document in which the project promoter, NEA or responsible entity outlines the impacts of involuntary resettlement, details the procedures for identifying, evaluating, and compensating those impacts, and defines the actions to be taken throughout all phases of the resettlement and/or livelihood restoration process. This guideline provides guidance on preparing a LARAP, including disclosure requirements and a generic outline. Projects may use alternative terminology based on the scope and types of land acquisition transactions.

Scope

The scope and level of detail of the resettlement plan depend on the magnitude and complexity of the resettlement. The plan should be based on the up-to-date engineering designs-based information as well as land acquisition/land use restriction (LA/LUR) risks and impacts identified through Environmental and Social (E&S) studies, in accordance with GoN and DP requirements. However, the scope of the plan is typically based on:

f) the proposed project and its potential impacts on displaced people and other adversely affected groups,
g) appropriate and feasible mitigation measures, and
h) the legal and institutional arrangements needed for the effective implementation of resettlement measures.

Land Acquisition and Resettlement Action Plan (LARAP) should contain the following:

1. **Executive Summary**.
   This section provides a summary of the project scope, the purpose of the LARAP, key findings from the assessment of LA/LUR risks and impacts, the modes of LA/LUR adopted, planned mitigation measures, institutional arrangements for project and LA/LUR planning and implementation, and the overall budget for LA/LUR.

2. **Description of the Project**.

Project Title:	
Project Components:	
Location:	
Estimated Cost:	
Start/Completion Date:	
Description:	The [name of the project] is being prepared under the ADB's & World Bank's Environment and Social Standard (ESS 5) on Land Acquisition and Land Use Restriction. This section summarizes the project and project area, including its E&S context, and documents the design alternatives considered to avoid and minimize LA/LUR risks and impacts. It also provides detailed justification for the selected design options, considering the E&S, technical, and financial costs and benefits.

3. **Objectives.**
   State the guiding principles and objectives of the LARAP

   Guiding Principles:

   1) Avoid economic and physical displacement or, when unavoidable, minimize such displacement by considering feasible alternative project designs and sites.

2) Mitigate unavoidable adverse social and economic risks and impacts from LA/LUR by (i) providing timely compensation for loss of assets at full replacement cost, and (ii) assisting project-affected persons in their efforts to improve or at least restore their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

3) Enhance livelihood opportunities and living conditions for disadvantaged or vulnerable individuals, including providing adequate housing with essential services, utilities, and secure tenure for those who are physically displaced.

Objectives:

i. To reduce the negative social, economic, and environmental impacts of land acquisition and land use restrictions on affected individuals and communities.
ii. To provide fair, transparent, and timely compensation for the land and assets lost due to land acquisition, in accordance with legal frameworks and international standards.
iii. To safeguard the rights of vulnerable and disadvantaged groups, ensuring their participation in the planning process and addressing their specific needs through targeted mitigation measures.
iv. To design resettlement and livelihood restoration measures that help affected individuals and families restore or improve their livelihoods and living conditions.
v. To improve the standard of living of displaced people, providing access to sustainable income sources, housing, and essential services.

4. **Census Survey and Baseline Socioeconomic Studies.**

This section presents a summary of the findings of the household-level census survey based on detailed engineering designs, identifying and enumerating affected people. This includes surveying land, structures, and other fixed assets to be affected by the project, with the involvement of the affected individuals. The census survey also serves other essential functions:

a. to define, identify, and enumerate the number and types of all project-affected persons and communities, including host communities, if any, as well as their relevant social, economic, and cultural characteristics including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population.
b. to ascertain their ownership and use rights with respect to land and other assets to determine their eligibility to compensation and assistance.
c. to capture information on vulnerable groups or people for whom special provisions may have to be made.
d. to disaggregate all data and information by gender, as well as for disadvantaged or vulnerable groups, supported by tables and diagrams where applicable.
e. to identify public or community infrastructure, property or services that may be affected.
f. to provide a basis for the design of and budgeting for, the resettlement program.

g. to provide a basis for excluding ineligible people from compensation and resettlement assistance in conjunction with establishment of a cut-off date.
h. to establish baseline conditions for monitoring and evaluation purposes.

Depending on the project context and the complexity of land issues, additional studies on the following subjects may be necessary to supplement or inform the census survey:

i. Land tenure and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, nontitle-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the project area.
j. The patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project; and
k. Social and cultural characteristics of displaced communities, including a description of formal and informal institutions (e.g., community organizations, ritual groups, nongovernmental organizations (NGOs)) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

5. **Assessment of Land Acquisition/Land Use Restriction**
This section discusses the methodologies, findings, and conclusions of the census and socioeconomic baseline studies conducted, detailing the magnitude and types of LA/LUR-related losses caused by the project. It also includes information on the social specialists and valuation experts engaged to carry out the LA/LUR assessment, covering the following**:**
   a) A summary of screening and scoping activities conducted to determine the scope of the social impact assessment and the modes of land acquisition (LA/LUR) to be adopted.
   b) The project components or activities that give rise to displacement, explaining why the selected land must be acquired for use within the time frame of the project.
   c) A summary of the scope and scale of land acquisition and its impacts on structures and other fixed assets, including an inventory, detailed measurement survey, and valuation of all losses. This should identify and assess the loss of land, other assets, land use rights, and sources of livelihood.
   d) The methodology used to value losses and determined their replacement cost, along with a description of the proposed types and levels of compensation for land, natural resources, and other assets under national law. This also includes supplementary measures to ensure that compensation reflects the replacement cost of these assets.
   e) Findings of the assessment of the project-imposed restrictions on use of, or access to, land or natural resources.
   f) Synchronization of LA/LUR assessments with the preparation of a final detailed engineering design of project facilities.
   g) Identification of impacts with any pending assessment.
   h) The mechanisms established and agreed to minimize displacement, to the extent possible, during project implementation.

6. Cutoff Date

This section discusses the process of declaration of cut-off date. Establishing a cut-off date is a crucial step in the land acquisition process. NEA can either set the cut-off date after completing the census survey and inventory of losses, issuing a public notice independently, or follow the provisions outlined in the LAA. According to Clause 9 of the LAA, the cut-off date is defined as the date when the Compensation Determination Committee (CDC) issues a land acquisition notice, after which no further claims or enumeration of affected land and/or assets will be accepted. In any case, information about the cut-off date must be effectively disseminated across the project. The declared cut-off date applies to both titleholders and non-titleholders alike

7. Stakeholder Consultation & Disclosure of Information

a) This section outlines stakeholder engagement activities during LA/LUR planning and Resettlement Plan implementation, including stakeholder identification, information disclosure, and the grievance mechanism. It identifies the project's stakeholders and describes how affected populations, including women, minorities, and vulnerable groups, have been and will continue to be consulted, with their views incorporated into the planning, design, and implementation of the resettlement plan, particularly.
    a. A description of the strategy for consultation with, and participation of, displaced persons in the design and implementation of the resettlement activities.
    b. A summary of the views expressed and how these views were considered in preparing the resettlement plan.
    c. A review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them; and
    d. Institutionalized arrangements by which displaced people can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that such vulnerable groups as Indigenous Peoples, ethnic minorities, the landless, and women are adequately represented.

b) Document the previous disclosure of relevant Land Acquisition/Resettlement (LA/LUR) information and plans provided to project-affected people. This should include details on alternative project designs, mitigation measures, entitlements, options, and valuation approaches. Additionally, discuss the strategies that will be implemented to disclose the necessary information during the future implementation of the Land Acquisition, Resettlement, and Action Plan (LARAP). Ensure that the information is disclosed and disseminated in a timely manner, in an accessible location, and in a format and language(s) easily understood by affected individuals.

8. Grievance Redress Mechanism

This section describes affordable and accessible procedures for third-party settlement of disputes arising from displacement or resettlement; such grievance mechanisms should consider the availability of judicial recourse and community and traditional dispute settlement mechanisms.

9. **Legal Framework**.

This section outlines the national regulatory framework and DP's E&S standards that NEA projects must comply with, explaining the importance of adhering to both national and international standards for NEA projects.

a) NEA shall follow the applicable national laws and adhere to international standards for acquiring different types of land and resettlement, ensuring compliance with legal requirements and best practices.
    i. **National Laws**
        1. Land Acquisition Act (LAA, 1977), Land Act (LA, 2064) & Guthi Land Act (GLA, 1976) for acquiring & compensating Private & Guthi Land
        2. Forest Act (2019) & Regulation (2022) for acquiring and compensating forest lands
        3. Electricity Act (1992) & Regulation (1993) for restriction of land use and compensation
        4. Guidelines for Registering, Utilizing, and Leasing Government Lands, 2022 for acquiring and compensating public or government lands
    ii. **DP's E&S Standards**
        1. The World Bank Environmental and Social Framework (2018), particularly Standard 5 on Land Acquisition, Restriction on Land Use and Involuntary Resettlement
        2. The Asian Development Bank Environmental and Social Framework (2024), particularly Standard 5 on Land Acquisition and Land use Restriction
        3. The IFC Performance Standards (2012), especially Standard 5 on Land Acquisition and Resettlement
b) Prepare and present a legal gap analysis comparing the national laws with the requirements of ADB/WB/IFC ESS5, highlighting measures taken to address any gaps. The analysis focuses on the LA/LUR process, eligibility criteria for compensation and assistance, as well as valuation methods and entitlements relevant to the project's assessed LA/LUR risks and impacts.

10. Proposed Mitigation Measures

This section documents mitigation measures for all applicable permanent and temporary, full and partial types of LA/LUR-related losses, including:

a) Entitlement matrix for all applicable types of losses, eligible project affected persons, assistance, and entitlements.
b) Measures for compensation for all lost assets and access to assets and livelihood resources.
c) Options for livelihood and income restoration and improvement.
d) Options for relocation and resettlement, including a detailed description of principle and process of site selection and preparation.
e) Measures to address the specialized needs of the disadvantaged or vulnerable.
f) Define the projected affected and displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates

11. Outcomes of Land Acquisition/Land Use Restriction

This section summarizes the outcomes of the mitigation measures for LA/LUR, which will serve as key indicators for monitoring and evaluation.

12. **Implementation Arrangements**.

Discuss institutional roles, capacities, and responsibilities for LA/LUR planning and implementation as well as the arrangements to align the LA/LUR with procurement and commencement of civil works. Describe the implementation process and arrangements, identifying the agencies responsible for resettlement activities, as well as any NGOs/CSOs that may play a role in the project, including providing support to displaced people assessing:

a) institutional capacity of such agencies and NGOs/CSOs; and
b) steps proposed to enhance the institutional capacity of agencies and NGOs/CSOs responsible for resettlement implementation.

13. **Implementation Schedule**.
    An implementation schedule providing anticipated dates for displacement, and estimated initiation and completion dates for all resettlement plan activities. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.

14. Monitoring, Evaluation, and Reporting
    This section describes the monitoring and evaluation system, outlining the requirements and indicators for both internal and external monitoring of LA/LURP implementation, including third-party monitors, to ensure an accurate and objective assessment of the outcomes. Discuss the reporting responsibilities, arrangements, and requirements for monitoring and evaluation, specifying the frequency, format, and channels through which progress and outcomes will be communicated to stakeholders, including the roles of responsible entities and third-party monitors.

15. **Costs and Budget**.
    This section indicates itemized LA/LUR budget and the flow of funds and includes a timeline for LAP implementation. Tables showing categorized cost estimates for all resettlement activities, including allowances for inflation, population growth, contingencies, expenditure timetables, funding sources, and arrangements for timely fund flow, including resettlement funding for areas outside the implementing agencies' jurisdiction.
16. **Arrangements for adaptive management**. The plan should include provisions for adapting resettlement implementation in response to unanticipated obstacles to achieving satisfactory resettlement outcomes.

Additional Planning Requirements Where Resettlement Involves Economic Displacement

17. If land acquisition or restrictions on use of, or access to, land or natural resources may cause significant economic displacement, arrangements to provide displaced persons with sufficient opportunity to improve, or at least restore, their livelihoods are also incorporated into the resettlement plan, or into a separate livelihoods improvement plan. These include:
    a) **Direct land replacement**. For those with agricultural livelihoods, the resettlement plan provides for an option to receive replacement land of equivalent productive value, or demonstrates that sufficient land of equivalent value is unavailable. Where replacement land is available, the plan describes methods and timing for its allocation to displaced persons.
    b) **Loss of access to land or resources**. For those whose livelihood is affected by loss of land or resource use or access, including common property resources, the resettlement plan describes means to obtain substitutes or alternative resources, or otherwise provides support for alternative livelihoods.

c) **Support for alternative livelihoods**. For all other categories of economically displaced persons, the resettlement plan describes feasible arrangements for obtaining employment or for establishing a business, including provision of relevant supplemental assistance including skills training, credit, licenses or permits, or specialized equipment. As warranted, livelihood planning provides special assistance to women, minorities, or vulnerable groups who may be disadvantaged in securing alternative livelihoods.

d) **Consideration of Economic Development Opportunities**. The resettlement plan identifies and assesses any feasible opportunities to promote improved livelihoods as a result of resettlement processes. This may include, for example, preferential project employment arrangements, support for development of specialized products or markets, preferential commercial zoning and trading arrangements, or other measures. Where relevant, the plan should also assess the feasibility of prospects for financial distributions to communities, or directly to displaced persons, through establishment of project-based benefit-sharing arrangements.

e) **Transitional Support**. The resettlement plan provides transitional support to those whose livelihoods will be disrupted. This may include payment for lost crops and lost natural resources, payment of lost profits for businesses, or payment of lost wages for employees affected by business relocation. The plan provides that the transitional support continues for the duration of the transition period

Appendix of the Land Acquisition Plan

18. Appendix of the Land Acquisition Plan

This section provides documentary evidence supporting the assessment of LA/LUR risks and impacts, including consultation minutes and attendance lists, impact and compensation registers for all affected persons, baseline questionnaires, valuation reports, cut-off date notifications, maps, photographs of planned project facilities, and affected properties, among other items. Documents in the local language will be translated into English.

Annex 17: Entitlement Matrix

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
1. Agricultural, Residential, Commercial, Pasture and Public Land			
1.1Loss of Private Land under any form of tenure	• Titleholder • Encroacher/ Squatter on public land	a. Provide compensation at full replacement cost, or b. Provide a full title to the land of equal area and productivity acceptable to the owner in the vicinity. c. If the land is not available elsewhere then provide cash compensation at full replacement cost based on the current market rate or Government rate plus all taxes and transection cost whichever is higher. d. In the case of vulnerable groups, preference should be to replace land for land, if similar types of lands are available e. Squatter/encroachers cultivating the affected land for at least three years before the cut-off date will be entitled to an allocation of land if A*ilani* or other government land is available. However illegal occupants after the cut-off date do not qualify for compensation for land losses. f. Resettlement assistance in place of compensation for land occupied (land, other assets, employment) at least restores their livelihoods and standards of living to pre-displacement levels. In the case of farmland, the PAP will be entitled to the cultivation disruption allowance equal to one year of production.	• A List of available A*ilani* land in each affected municipality/rural municipality is required • A list of affected and entitled persons and the area of land loss is required • Notice to vacate will be served at least 35 days before the acquisition date. • If any owner having a significant impact receives cash compensation for farmland and purchases replacement farmland within 1 year from the date of receiving compensation, all related land registration fees, taxes and duties will be borne by the project. • Cash compensation will be paid through Bank account of the affected persons. Opening of joint (husband and wife) Bank account of the affected person will be encouraged to transfer compensation amount. • To ensure fair compensation, determination of rates will be established not more than one year before property acquisition.

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
1.2 Loss of Tenancy Land	• Landlord &Tenant by a written agreement (That is yet in practice & to be processed as per 2058 B.S. amendment in Land Reform Act). • Renter/lease holder	a. Both the landlord & the tenant will be entitled to 50 percent of the land compensation amount each (As per 2058 B.S. amendment to Land Reform Act) b. Non-registered tenant/renter/lease holder does not qualify for compensation for land losses; however, they will be entitled to compensation for crops and other investments.	• Where a renter/leaseholder has a sharecropping arrangement, the compensation payable should be apportioned according to the arrangement.
1.3 Loss of *Guth*i (Trust) Land	• Entitled persons/ institutions and tenants under the *Guthi* Corporation Act 2033.	As per *Guthi* Corporation Act, 2033	• As per Clause 42 of the Guthi Corporation Act, 2033 NEA will either replace land or provide replacement cost.
1.4 Temporary Loss of Private Land	Titleholder Tenants and landlord (As both are the owner of equal (i.e. 50 %) shares, hence treated as a private landholders.	a. Compensation for the crop, land productivity and other property losses for the duration of temporary occupation. b. Compensation for other disturbances & damages caused to property. c. Or, the Contractor to negotiate a contract agreement on the rental rate with the owner for the temporary acquisition of land. d. Project and the Contractor to ensure that persons other than the owner affected as a result of temporary acquisition are compensated for the temporary period. e. Land should be returned to the owner at the end of the temporary acquisition period, restored to its original condition, or improved as agreed with the owner	• The owner/entitled party will sign a temporary occupation contract specifying: ➢ Period of occupancy, ➢ The terms and conditions for calculation of production losses, ➢ The frequency of compensation payment, and ➢ Land protection and rehabilitation measures. The land will be returned to the owner at the end of the temporary acquisition, restored to its original condition.
2. Crops and Private Trees			
2.1 Loss of Private Trees & Perennial	• Titleholder • Lessee/cultivators	a. Advance notice to harvest crops	• Inventory of the tree and plant species list

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
Crops 2.2 Loss of Non-perennial crops	having an agreement with the owner • Landless squatter/ encroachers on public land	b. Net value of existing crops where harvesting is not possible. The crops which live for short time will be paid following the one-year output value. The crops which have lived for several years will be compensated at market value based on loss of future production, based on 5 years' annual net production for fruit & fodder trees & 3 years' annual net production for timber/ fuel wood trees & other perennial crops.	• List of the owner, non-perennial crops and the area (if applicable) of cultivation should be prepared • The PAPs will receive notice 3-6 months in advance regarding crop harvesting. Crops grown after the issue of the notice will not be compensated. • The work schedule has to be adjusted considering the crop seasons so that for avoiding crop damage. • Crop/trees/bamboo market values will be determined by the CDC in consultation with the District agriculture and forestry office. • Where a tenant/renter/lessee & landowner have a sharecropping arrangement, the compensation payable should be apportioned according to the arrangement. • Salvaged materials take away by the owner with no deduction from compensation
3. Houses, Structures and Other basic facilities			
3.1 Loss of own house & Privately owned other structures 3.2 Loss of commercial establishment	• Full Titleholder • Tenant/Renter/ Lease holder (own accommodation) • Landless squatter/ encroachers on public land	a. Compensation for full or partial loss of house and other structures at the full replacement cost of materials and labor according to house/structure type, with no deduction for depreciation. b. Every displaced household is entitled to a housing displacement allowance, based on the established rates per HH per capita income and/or minimum wage rate.	• Replacement costs at the market value of houses and structures will be determined by the CDC in consultation with local experts and compensation prices will be finalized with the participation of PAP representatives. • Formal resettlement planning will be undertaken where more than 10 households from one

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
		c. Every household will receive a transportation allowance on an actual cost basis. d. However, loss of structures other than household and commercial establishments does not entail payment of a displacement allowance e. Resettlement assistance to those most vulnerable households to restore pre-displacement livelihoods. f. Every displaced household with a business affected will be entitled to receive a business disruption allowance as per the calculation during the impact assessment.	settlement/residential area are displaced if the households having significant impacts opt for a group resettlement site. • Other structures include toilets, sheds, walls, fences, water mills, workshops etc. • Materials may be salvaged with no deduction from compensation
3.3 Loss of rented accommo-dation	Renter/Lessee holder	a. One-time lump sum grant; minimum of one month's income based on the nature of business and type of losses assessed on a case-to-case basis. Daily minimum wage rate may be used as compensation for business loss as a basis for calculation when and as applicable. b. One-time cash assistance (displacement allowance) equivalent to one month of rent for moving to alternative premises for commercial establishment c. The household will be entitled to a rental stipend for the loss of rented accommodation d. Cash compensation for damages to structures resulting from the temporary occupation of land at replacement cost.	• Squatters/encroachers staying for more than 10 years will be entitled to compensation for their land and property • Vulnerable encroachers with economic losses may be entitled to assistance as a vulnerable group, at established rates determined by the CDC. • Renter/ lessee will not be entitled to compensation of structures. However, if the structures are made by them, they will be entitled to compensation or will be according to the lessee agreement
3.4 Other basic household facilities	• Titleholder • Tenant/lessee holder/ renter • Landless squatter	Payment of installation charge or compensation for relocation of electricity, telephone line, TV cable drinking water and other infrastructure to the installer, if	• The concerned authority will be requested to assist the households to reinstall or permit the facilities in their new location if Applicable

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
	/ encroacher on public land.	these exist.	/required.
4. Community and Cultural Assets/ Facilities			
4.1 Loss of community buildings/ structures, cultural assets	Local community/User group	a. Cash compensation for restoring affected community and cultural resources. b. Restoration of affected community buildings and structures to at least previous condition, or replacement in areas identified in consultation with affected communities and relevant authorities. c. Restoration before the commencement of the project where necessary, or to be determined in consultation with the community.	• Community resources/facilities include schools, temples/monasteries, religious trees, graveyards, *Ghats*, waiting sheds, including the community hall etc. established by the local community/ CBOs.
4.2 Loss of land	Local community user's group	Land for land replacement for Restoration of access to community resources	• The land revenue office in the district and concerned municipality will be requested to assist communities with land replacement by identifying the area nearby.
4.3 Loss of community forests and other natural resources due to construction	Forest user's group/Other Groups Concerned	a. Mitigation measures should be initiated to control erosion caused by tree cutting and to stabilize and rehabilitate the slopes with suitable bioengineering works and vegetation. b. Community forestland lost due to road construction should be replaced and reforested according to DoFSC regulations including others concerned. c. Advance notice to harvest resources from affected community forest areas. d. Valuation basis of community forest loss will be similar to the national forest. DoR and DoFSC will sign MOU for valuation of losses. e. Compensation of trees will be	• List of plant and tree species lost and an assessment for maintaining that kind of vegetation • Compensation for trees is calculated based on the type, age, and productive value of affected trees in consultation with the concerned forestry office and FUG. • To minimize damage the department of Forestry will be requested for necessary action.

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
		as per the provision of prevailing acts and rules.	
5. Displacement Allowances			
5.1 Displacement of households 5.2 Displacement of commercial enterprise 5.3 Transportation allowance 5.4 Severe disruption to cultivation	• Titleholder • Tenant /Lessee holder, Renter • Landless squatter / Encroachers on public land.	a. Every displaced household will be entitled to a housing displacement allowance. b. Each displaced renter and lessee holder household will be entitled to a rental stipend for loss of rented accommodation. c. The households affected by partial loss of structures that can be repaired will be entitled to repair allowance for mitigating the loss, not displacement allowance. d. Every household of displaced businesses will be entitled to a business displacement allowance for loss of commercial establishment. e. Each displaced household will be entitled to transportation assistance to move their belongings f. Cultivation disruption allowance for severe disruption to household cultivation levels.	• Each displaced household will receive a housing displacement allowance equivalent to two months' poverty line income (PLI). The Central Bureau of Statistics (CBS) produces the poverty estimates based on the Nepal Living Standard Survey (NLSS). The national poverty line for Nepal estimated at NPR 72908 per person per year in 2020 is an absolute poverty line based on the cost of basic food and non-food needs. • Displaced households living on rent will receive 35 days' notice or rental stipend equivalent to 0.5-month PLI plus transportation assistance by the project. • Allowances will be paid before placement. • Partial loss is to be calculated as per the cost of replacement material and labor cost. • The following cultivation disruption allowances will apply to: ➢ households with total landholdings of 0.25 ha and smaller who lose more than 10 % of their landholdings; ➢ households with total landholdings above 0.25 ha who lose more than 25 % of their landholdings; ➢ households whose

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
			production levels are severely affected through participatory assessment with PAPs. ➢ The cultivation disruption allowance will be equal to one season's production on the area of land lost, based on published District/ municipal production figures, land type and crop market prices for the year of acquisition.
6. Group Losses, Vulnerability and Rehabilitation Measures			
6.1 Loss of income indirectly due to the project (employment for porters and other laborers)	• Persons in the vicinity of the road may be adversely affected by the project although they do not lose assets. • Female community living near construction section	a. Rehabilitation assistance such as information dissemination regarding project impacts, compensation alternatives and risks. b. Preferential access to project construction employment opportunities, to the extent possible. c. Assessment of current economic activities and potential for improvement to these activities, as well as alternative income earning opportunities. d. Counseling/information dissemination/ skill development training for job upgrading/diversification and other possible support services. e. Employment opportunities for unskilled labor to females should make compulsory at an established rate of at least 33 % female participation.	• List of SPAF with potential impact should be prepared in consultation with PAPs & Civil Society and may include: ➢ Porters and other providers of non-vehicular transport. ➢ Ethnic, occupational cast people ➢ Having aged people as household heads and having disabled family members in the households ➢ Women headed poor households ➢ Poorest of the poor landless households & squatters • Provide clauses in Work Contracts that will require a specific employment quota for local female residents, taking into special account vulnerable groups.
6.2 Severe loss of assets directly due to the project, and severe	• Households/ PAPs having significant impacts • Households of the	a. Information dissemination regarding project impacts, compensation alternatives and risks, and resettlement options (where required).	• The rehabilitation measures will be targeted at PAPs having a significant adverse impact and vulnerable groups in the vicinity of the

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
impact indirectly caused by the project.	Vulnerable categories • PAPs family members over 16 years of age	b. Technical support on saving schemes and cash management. 3. Preferential access to road construction employment opportunities, to the extent possible. c. Assessment of current economic activities and potential for improvement to these activities, as well as alternative income earning opportunities. d. Assistance with training in life skills that would help in obtaining employment and/or earning a livelihood. e. The project will investigate training programs and institutions. In such a case, Funds will be paid directly to the relevant institutions. Or, the project by itself will arrange a suitable program for its mitigation. f. Assistance through the implementation Indigenous People Development Plan	project area, even though they do not lose assets. • Training on road construction and hiring workers will be included in Contractors' contracts • PAPs having a significant impact who opt for training assistance will be entitled to a training subsistence allowance equal to a maximum of one or three months' minimum wage as established at the national or local level, whichever amount is higher, for the duration of the training course. • The respective Agriculture and forestry-related Institutions will be requested to assist in implementing the forestry and agriculture program if required. Any costs required for this will be borne by the project.
7. Damages Caused during Construction			
7.1 any kind of Private and Public Properties	All categories entitled persons	a. Extreme care should be taken by Contractors to avoid damaging public and private property unnecessarily. b. Where damages do occur to public or private property as a result of construction works, the affected parties shall be compensated immediately for damages to crops and trees, and damaged land, structure and infrastructure shall be restored immediately to their former conditions.	The same entitlement policies will apply to other lands acquisition
8. Government Property			
8.1 Loss of infrastructure and utility facilities	Relevant agency and service provider: Electricity – NEA	Such facilities will be repaired or replaced.	To be undertaken in consultation with the relevant offices and service providers.

Type of Loss	Entitlement Unit	Description of Entitlement /Compensation Policy	Implementation issues/procedures
	Telecommunication – NTC Water supply and drainage: • Local government/ • Water Supply Office/ Water supply User committee		
8.2 Loss of forest areas	DoFSC/DoNPWC/ Provincial forest ministry/PA authority/DFO as delineated in Forest Rule 2079.	Mitigation through afforestation (compensatory plantation).	• An assessment for maintaining that kind of vegetation • To be undertaken in consultation with the DoFSC/DoNPWC/DFO/PA Authority

Annex 18: Biodiversity Assessment and Management Plan

The NEA acknowledges that its operations can impact biodiversity and habitats through various project-related effects such as habitat conversion, ecological disruption, pollution, habitat fragmentation, and introduction of invasive species. These impacts may be direct, indirect, or cumulative.

To manage risks, NEA will follow a structured approach starting with scoping to identify potential biodiversity concerns. It will utilize online and in-country tools to assess conservation priorities in the project area. NEA prioritizes avoiding negative impacts on biodiversity but, when avoidance is not possible, takes measures to minimize and restore biodiversity following the mitigation hierarchy.

NEA will employ qualified biodiversity in environmental and social assessments to ensure effective mitigation strategies. If significant risks are identified, a Biodiversity Management Plan (BMP) will be developed and implemented. This plan may be a separate document or integrated into the Environmental and Social Management Plan (ESMP), depending on the project's scale and risks.

1. Objective

- **Identify Sensitive Sites**: Identify sensitive sites before project activities to minimize environmental impact (Critical Habitats, if any)
- **Apply Mitigation Hierarchy and Precautionary Approach**: Implement these principles in the design and execution of projects impacting biodiversity.
- **Evaluate Potential Impacts**: Assess the potential impacts of interventions on biodiversity, including direct (e.g., habitat loss due to construction) and indirect impacts (e.g., changes in water quality or flow etc).
- **Recommend Mitigation Measures (BMP)**
    - Reduce impacts of the Project on biodiversity values to first avoid, then minimising where possible and then restore, and as a last resort, offset impacts;
    - Ensuring no net loss where natural habitats are converted or degraded and net gains where Critical Habitats are converted or degraded.
    - Respect the requirements of legally protected and internationally recognized areas of high biodiversity values by ensuring that any activities undertaken are consistent with the area's legal protection status and management objectives.
    - Adopt practices that are practical and easily implementable whilst meeting the objectives of sustainably managing biodiversity;
    - Compensate for residual impacts to biodiversity values through biodiversity offsets; and
    - Work with local communities and key stakeholders to restore biodiversity values.

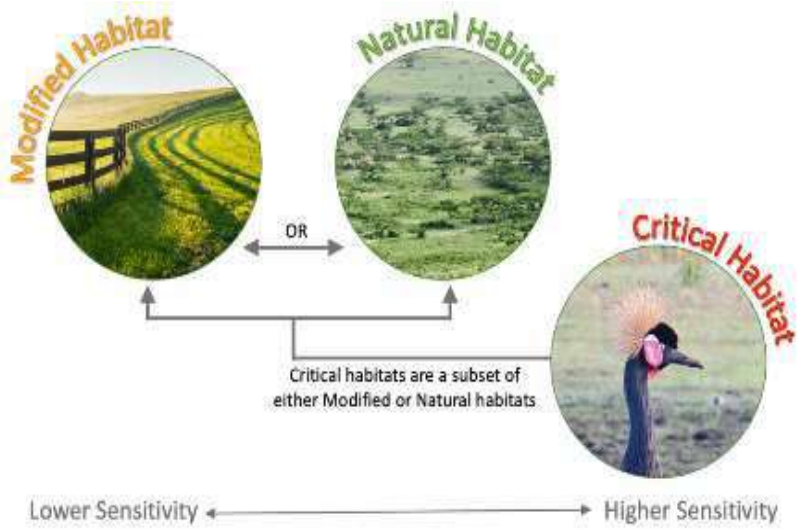
2. Approach

2.1 Review of Relevant Laws and Policies: Review laws related to Forest and Biodiversity such as Forest Act, 20719, Forest Rules, 2022, Environment Protection Act, 2019, Environment Protection Rules, 2020, Plant Protection Act, 2007, Aquatic Animal Protection Act, 2017, The National Park and wildlife Conservation Act (1973), National Park and Wildlife Conservation Regulations (1974), Himalayan National Park Regulation (1979), Conservation Area Management Rules (1996), and Buffer Zone Management Rules (1996), CITES Act 2017, Wildlife Friendly Linear Infrastructure Guidelines 2022 etc.

2.1 Review Scientific Research and Project Documents: Study the latest scientific research and project-related documents to understand past events in the project area, preparing for interactions with key informants.

2.2 Site Screening[46]: Site screening will be carried out to

- Understand the conservation value of the project area.
- Identify the biodiversity sensitivity associated with the project influence area (such as presence of CH).
- Gather information to guide biodiversity assessment (such as duration and seasonal studies, budgets and other resources needed).
- Reduce impact to threatened species and their habitats



[46] There is array of biodiversity tools available, covering many different disciplines e.g. National data and National Biodiversity Strategic Action Plans (NBSAP), Global Forest Watch (GFW), IUCN Red List of Threatened Species, Global Biodiversity Information Forum (GBIF), World Database of Protected Areas (Protected Planet), World Database of Key Biodiversity Areas (KBA), Integrated Biodiversity Assessment Tool (IBAT) etc.

A Critical Habitat screening is typically done at desktop level followed by field verification for Critical Habitat Assessment (CHA) field verified to identify:

- The key species sensitivities needing to be assessed.
- The methods of assessment, timeframes and field skills required.
- NEA's ToR for most biodiversity surveys allows scope for time and budget extension if sensitive biodiversity is discovered during study.

2.3 Assessment to Identify Potential Risks and Impacts on Biodiversity

3. Biodiversity Management Plan

3.1 Project outline

3.2 Applicable standards, references and documents

3.3 Objectives

3.4 Application

3.5 Biodiversity management actions

3.6 Monitoring and evaluation

3.7 Role and responsibilities

3.8 Budget for implementation

3.9 Plan review and update

Annex 19: Indigenous Peoples Plan Management Guideline

The Nepal Electricity Authority (NEA) is required to prepare an Indigenous Peoples Plan (IPP) when an Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management System (ESMS) screening identifies that Indigenous Peoples are present in the project area and/or might be negatively affected by the project. This Plan adopts the definition of Indigenous Peoples as defined in the National Foundation for Development of Indigenous Nationalities (NFDIN) Act 2002 and the ILO Convention 169 on Indigenous and Tribal Peoples in Independent Countries. The IPP includes measures to avoid, minimize, mitigate, or compensate for adverse impacts, and ensure that Indigenous Peoples receive culturally appropriate benefits. The NEA will follow these steps while developing the IPP, which is an integral part of the Social Impact Assessment:

1: Define Objective and Scope of the IPP

The main objective of this IPP is to set out the measures for NEA to ensure that potential adverse impacts of a project on Indigenous Peoples are identified, avoided, and minimized to the extent possible, and mitigation measures and compensation for the adverse impacts are designed in meaningful consultation with indigenous communities. The IPP will have the following specific objectives:

- Identify the Indigenous Peoples affected by project interventions and assess impacts on the Indigenous Peoples.
- Identify potential adverse impacts, and associated mitigation measures to address the adverse negative effects.
- Identify positive impacts and associated improvement measures to preserve the language, religion, culture, identity, traditional knowledge and skills; and enhance social, cultural, and economic development of the Indigenous Peoples.
- Develop and design capacity development programs to improve Indigenous Peoples' capacity on implementing the mitigation measures in a culturally appropriate manner.
- Engage stakeholders during design of IPP and ensure their meaningful participation in the plan implementation.
- Develop and implement IPP implementation, monitoring, and evaluation process and define institutional arrangement for implementation of the IPP.

The main purpose of the Indigenous Peoples Plan (IPP) is to document the actions agreed upon with affected indigenous communities to avoid, minimize, or offset any negative impacts a project might have on indigenous communities. These actions are usually presented as a management plan, outlining specific responsibilities and timelines, and implementation is monitored throughout the project. Therefore, the NEA will consult with legitimate representatives from all indigenous communities in the project area while developing the IPP. If the ESMS Screening identifies that Indigenous Peoples could be affected negatively by the project even without being resided in the project site, NEA will still consult with these groups.

2: Methodology for IPP Preparation

The IPP preparation involves collaborative and consultative process and good faith negotiations, involving the Indigenous Peoples in the project area. The methodology includes the following key activities:

- Determine the participatory planning process that describes the process to be used for engaging indigenous communities in project design. This also includes identification of representatives to engage in the IPP process with their names and specific functions and responsibilities.
- Specify how participation of women and/or vulnerable groups even within the indigenous communities will be ensured assured in the plan development process.

- Collect and analysis of socioeconomic information about IPs living in the project area or IPs not living in the project area but adverse affected by the project
- Collect both quantitative as well as qualitative information, as required and appropriate
- Carry out participatory data collection tools for data collection, such as community needs assessment, focus group discussions (FGDs), Key Informant Interviews (KIIs) and secondary data collection and review.
- Review the data collected for an Environmental Impact Assessment (EIA) and social mapping exercises and extract relevant information for IPP.
- Conduct a series of structured in-community consultations and community-wide representative meetings for receiving inputs for the IPP structure, content and implementation arrangements.
- Specify the need of any Free, Prior and Informed Consent (FPIC) process to be carried out with the Indigenous Peoples' communities.
- Where necessary, conduction of Free Prior Informed Consent (FPIC) on obtaining consents from Indigenous Peoples for any activities undertaken on their land, culture and traditional/customary rights.

3: Relevant national and international legal and policy frameworks

- Provide a definition and brief description of Indigenous Peoples in Nepal
- Present a brief overview of national and international legal and policy framework that applies to preparation of Indigenous Peoples' plan.
- Identify the legal and policy gaps related to Indigenous Peoples' right and safeguarding, and identify measures for the gaps.

4: Project Description

- Provide a brief description of the project, including project location (with maps), project objectives, project components, socio-economic-cultural status of the project area, settlements/communities with Indigenous Peoples in the project area (homogenous community, heterogeneous/mixed community)

5: Socio-economic status of affected Indigenous Peoples and communities (Community Mapping and Identification of Target Indigenous People in the Project Area)

The step is to map the project affected Indigenous Peoples and their community to collect baseline information on the demographic, social, economic, cultural characteristics and describe land use, natural resources, traditional/customary rights and other relevant information related to the Indigenous Peoples residing in the project area or impacted negatively. Usually presence of affected Indigenous Peoples in the project area are identified during the programs' environmental and social due diligence process; environmental and social impact assessment, or any other similar study. If the process of identifying groups for the purposes of applying standards on IP may create a serious risk of exacerbating ethnic tension or civil strife, or where the identification of culturally distinct groups is inconsistent with national constitution provisions, an alternative approach may be pursued.

A baseline information is necessary to provide a clear profile of the affected communities, their circumstances and livelihoods, the natural resources they use and depend on, cultural heritage and spiritual belief and practices, etc. Hence relevant baseline information will be collected using various methods and tools. The following information will be collected for baseline:

- Identify project affected Indigenous peoples and villages with analysis of potential direct and indirect impacts on Indigenous Peoples due to the proposed project activities. For this, a participatory social mapping of Indigenous Peoples and villages will be conducted.

- Since impact on socio-economic, cultural and livelihood practices of indigenous Peoples depends more on settlement/community than administrative boundaries, information will be collected disaggregated by composition of the affected Indigenous Peoples in a settlement/community. This will identify Indigenous Peoples groups their composition in a settlement/village in terms of number/percentage of households.
- Under community mapping, information will be collected and ethnographic profiles of Indigenous Peoples will be prepared. The profile will include demographic profile; cultural overview, practices and traditions; language and communication; social structure and organization; land use and natural resource management; tangible and intangible cultural heritage, spirituality, social norms and beliefs; livelihood (economy and subsistence); capacities; traditional/cultural practices; and contemporary economic activities and challenges.
- The baseline information will further include:
    - The basic census, socio-economic data and inventory of affected assets of IPs;
    - Ownership of residential, economic and productive assets;
    - Annual income from primary and secondary employment opportunities (if applicable);
    - Information on land territories that the affected IP group owns/has traditionally owned, or customary used or occupied;
    - Economic information of community (e.g., brief information on economic and natural resources, production and livelihood systems, tenure systems, resources they depend on etc.);
    - Social and cultural information of community (e.g., description of kinship, value system, types of social organizations of formal and informal groups, places of cultural and cosmological importance).
    - Differences in resource access and use, ownership rights and social patterns for women and men.
- The key findings of the social baseline data will be analyzed and summarized in the IPP, which includes an analysis of impacts, risks and opportunities and recommended possible measures to mitigate adverse impacts, enhance positive impacts, conserve and manage the affected groups' natural resource base on a sustainable basis, and achieve sustainable community development.

6: Analysis of FPIC Triggering Circumstances and Process

- Before any engagement is conducted with Indigenous Peoples, NEA will clearly define and develop consultation and engagement strategy in alignment with the principles of free prior and informed consent tailored to fit the needs of Indigenous Peoples and affected communities and stakeholders. The key principles of FPIC are: meaningful engagement, good faith negotiations, gender and age sensitivity, early engagement, involvement of experts, cultural appropriateness and inclusivity.
- Define the specific circumstances triggering the FPIC under different Indigenous Peoples safeguard policy and standards.
- Identify special circumstances requiring selection of FPIC villages. The three key circumstances for FPIC as defined by the ADB and World Bank are[47]:
    - Adverse impact on land and natural resources subject to traditional ownership or under customary use or occupation
    - Cause displacement and relocation from land and natural resources subject to traditional ownership or under customary use or occupation

[47] https://documents1.worldbank.org/curated/en/972151530217132480/ESF-Guidance-Note-7-Indigenous-Peoples-English.pdf

    - Have significant impact on cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects subject to traditional ownership or under customary use or occupation
- Define the relevance of circumstances of each village/settlement or Indigenous Peoples that requires FPIC in terms of impact, determination of eligibility and component/aspect requiring FPIC.
- Prepare socio-economic and livelihood profile of FPIC villages
- Provide access to Indigenous Peoples to relevant program information prior to any decision-making that will affect them, and hence consultation will take place prior to and during program planning.
- Start consultation process as early as possible in the risks and impact assessment process.
- Define the three step FPIC process: (a) process for mutual agreement on discussion and decision-making framework, (b) discussion and decision-making process, and (c) documentation report of FPIC process.
- The FPIC process should focus on: (a) avoidance, minimization and mitigation of adverse impacts, (b) providing security of land tenure and customary land use, (c) involving Indigenous Peoples in the FPIC process, (d) cultural, ceremonial, and spiritual use of land embedded with their unique knowledge and belief system and cultural integrity, (e) protection and management of cultural and natural heritage, (f) measures to increase opportunities for Indigenous Peoples to benefit from the IPP programs, and (g) grievance management.

7: Analysis of Environmental and Social Impacts on Indigenous Peoples and Mitigation Measures

The NEA will carry out an analysis to identify primary social and environmental impacts of project activities (both positive and negative impacts), specifically on the identity, dignity, human rights, livelihood systems, natural resources, and cultural practices and beliefs of Indigenous Peoples. The positive impacts will be strengthened through proposed enhancement and benefit sharing measures, while negative impacts will be mitigated through specific mitigation measures.

- Identify involuntary resettlement related impacts on Indigenous Peoples and their mitigation measures with indigenous considerations. This includes physical/economic displacement, private property, common property resources, forest/natural resources, and environment and ecosystem services.
- Identify Indigenous Peoples related impacts and their mitigation measures. This includes impact on cultural heritage, impact on identify and social bonding, impact on gender, impact on community safety and security, impact on community health and safety, impact on influx of outsiders and workers camp, impact on access to resources and benefits, impact on employment and local economy, etc.

The analysis will focus on potential impacts and opportunities and agreed culturally appropriate measures to mitigate adverse impacts and enhance opportunities and benefits to help identify the focus of the IPs support activities (Environmental and social risk assessment). The NEA will:

- Analyze all impacts and losses that may be experienced by the Indigenous Peoples and communities, and in particular the impacts and losses that may be experienced by different affected groups including vulnerable groups and communities, and women.
- Verify the identified impacts and assess their extent and significance,
- Carry out consultation process to identify impacts for different affected groups. This is important because different groups (even within Indigenous communities) may be

disproportionately impacted by the project and hence might need different mitigation measures.

- Identify if FPIC is necessary and conduct FPIC process where necessary or where FPIC is triggered.
- Identify opportunity for providing culturally appropriate and gender inclusive benefits to indigenous people.
- Identify the project's area of influence by specifying the location of the group affected by the impact.

The NEA will follow the below process to identify mitigation measures with indigenous considerations:

- Provide description of all engagement to date, including FPIC processes, where appropriate.
- Carry out consultations with Indigenous Peoples, different groups and communities and different stakeholders in the affected areas to identify the measures and other development options to avoid or minimize the identified impacts.
- List out an overview of issues raised by the indigenous groups, and how they have been addressed or will be addressed.
- Determine compensation measures that are culturally appropriate if residual impacts cannot be avoided.
- Develop special mitigation measures for specific sub-groups within the Indigenous communities to ensure that the project does not create, perpetuate or aggravate gender and social inequalities between men and women and between the social sub-groups.
- Where applicable, define in the mitigation measures how the natural resources upon which the affected indigenous groups depend, and the geographically distinct areas and habitats in which they are located, will be conserved, managed and utilized.
- Develop the cultural heritage management plan where cultural heritage of Indigenous Peoples is impacted, including the actions around the enhancement of cultural heritage.
- Ensure inclusion of provisions for livelihood protection and enhancement in the mitigation measures, if applicable.

8: Program Design

Once the impacts and mitigation measures are identified and defined, the NEA will design the program to implement the impact mitigation measures engaging the affected Indigenous Peoples communities. The program will form the foundation of the Indigenous Peoples' development measures and benefit sharing under the IPP.

The NEA will design impact mitigation program with procedures and mechanisms for providing the mitigation measures and clearly defining Indigenous Peoples' development principles and program areas based on the outcomes of the baseline and consultations. It involves following steps:

- Develop/define transparent, fair and inclusive criteria for eligibility/entitlement of the mitigation measures for receiving benefits.
- Propose activities for Indigenous Peoples in the affected areas to mitigate or reduce identified environmental and social risks and ensure a sustainable social and economic development.

- Confirm the feasibility of the mitigation measures including institutional arrangements required for implementation of the measures and provisions for technical assistance and transfer of technology.
- Prepare an implementation schedule of mitigation measures, ensuring effectiveness of the measures to alleviate the impact for the affected Indigenous communities.
- Develop targets with interim milestones and an agreed schedule and responsibilities for implementation of the mitigation measures.

The impact mitigation and Indigenous Peoples enhancement programs can be divided into four different development pillars as below:

a. Socio-cultural development program

This program area addresses social and cultural issues directly or indirectly associated with the Project, and could include:

- Knowledge transformation, preservation and promotion of indigenous culture, customs and practices for the continuation of cultural heritage (tangible and intangible) and the lifeways of the Indigenous Peoples in the project area.
- Renovation, restoration, maintenance and providing facilities for cultural heritage
- Documentation, conservation, promotion and publication of Indigenous Peoples' cultural values, norms, customary practices, knowledge, skill, and traditional healing system by engaging Indigenous Peoples' experts and their knowledge holders.
- Projects to promote cultural enterprise development such as weaving, carving, painting, herbs, and plant processing.
- Projects to preserve, promote and support Indigenous Peoples' costumes, indigenous language, cultural rituals, and food system and food sovereignty.
- Projects encouraging respect for women and child rights and raising awareness on violence against women.
- Projects for environment and natural resource management through Indigenous Peoples' worldviews and values.

b. Economic Development program

These programs address community economic issues and opportunities, and potential measures/projects include:

- Agriculture component including horticulture and fruits farming, and commercial vegetable farming and marketing
- Livestock support projects:
- Traditional handicrafts and traditional skills
- Financial management and marketing including alternative income generation program
- Indigenous knowledge and livelihoods
- Environment and indigenous knowledge for natural resource management.

c. Community infrastructure development program

It addresses affected community infrastructure needs, and could include: Health infrastructure, water and sanitation infrastructure, educational infrastructure, cultural and religious infrastructure, transport infrastructure, agricultural and livestock infrastructure, social infrastructure, and tourism/recreation infrastructure.

d. Capacity development program

It addresses issues of awareness and capacity-building for project impacted Indigenous Peoples, and is related to access to information, awareness about transparency of project impacts, benefits, capacity building of Indigenous Peoples for them to be able to negotiate, contribute to the project and access project benefits in an equitable and just manner.

9: Institutional arrangements and responsibilities for Implementation of the IPP

The IPP implementation governance structure need to ensure representation and meaningful participation of project affected Indigenous Peoples, local community leaders, customary and spiritual leaders, owners/users of cultural heritages, women, youths and representatives of key Indigenous Peoples Organizations. The institutional arrangements and responsibilities for implementation of the IPP need to be discussed and finalized during the FPIC process and include in the project implementation plan.

- Identify and define the governance structure and collaboration for IPP implementation
- Ensure the engagement of local government in the IPP implementation.
- Define and agree on other institutional arrangements such as governance bodies, governing board, governing board executive committee, and programme committees.
- Form an IPP Implementation Support Unit and define the roles and responsibilities of the Unit including governing structure, staffing, and budget/costs.
- Prepare IPP program implementation guidelines describing procedures for selecting specific projects or activities for each program pillar and institutional coordination and day-to-day execution of the activities.

The implementation arrangements of the mitigation measures include the following activities:

- Prepare time-bound program action plan including the identified activities/measures
- Plan for training and capacity building activities for Indigenous Peoples, and make provisions of institutional strengthening of the Indigenous communities and the project executing agency.
- Ensure that required resources/budget is available for implementing the mitigation measures. Where appropriate, the potential funding source and fund mobilization mechanism will also be developed.
- Identify potential partners and delivery mechanism for implementation of the Indigenous Peoples' plan, and define the roles and responsibilities and arrangements of different stakeholders for coordination and implementation process.
- Develop sustainability plan of the mitigation measures beyond the project time frame, and facilitate implementation of the plan accordingly

10: Monitoring, Evaluation and Reporting

Monitoring, evaluation and reporting of IPP implementation is very crucial for the effectiveness of the mitigation measures implementation. To ensure effective program implementation, NEA will carry out both internal and external monitoring. The following activities will be conducted to ensure effective monitoring and evaluation of the mitigation programs in the IPP:

- Set out monitoring plan/framework with monitoring schedules, milestones, and evaluation indicators to monitor the effectiveness of the Plan.
- Ensure participatory monitoring mechanism ensuring participation of the affected Indigenous Peoples and communities.
- Identify key responsibilities of stakeholders/parties for monitoring of the plan

- Set out mechanism for regular reporting on the implementation of commitments made in the Plan and report progress towards achieving the agreed objectives of the Plan as agreed with the affected community.
- Monitor the IPP implementation by key stakeholders/parties as identified above and prepare social monitoring report on annual basis.
- Carry out third-party independent monitoring of IPP implementation, and prepare an external monitoring report.
- Carry out mid-term and final evaluation of IPP implementation (by using the service of third-party independent evaluation specialist)
- The following reports will be prepared: Quarterly and annual implementation progress reports, external monitoring reports, evaluation reports, grievance reports, and other as agreed by the governing body of IPP implementation.

11: Grievance Redress Mechanism

Grievance redress mechanism (GRM) is another important aspect of the Indigenous Peoples' Plan. The NEA will design GRM to resolve complaints related to the implementation of IPP and resolving disputes related to resource use restrictions. It will include avenues for resolving conflicts between affected Indigenous Peoples or other stakeholders. The NEA will:

- Identify and agree with the Indigenous Peoples and the stakeholders during FPIC and consultation meetings on the requirements for developing a GRM.
- Develop appropriate grievance redress mechanism to manage grievances from individuals, groups and communities dissatisfied with eligible criteria, mitigation measures or implementation arrangements.
- Establish a common and accessible information channel for receiving grievances with a formal process or lodging all complaints and issues.
- Ensure that the grievance management mechanism is culturally appropriate that it will not interfere with any existing processes or institutions within the Indigenous Peoples community designed for settling disputes among them.
- Maintain a grievance recording register at the IPP Support Unit, at the project site, and other relevant institutions to track and respond to complaints in a timely manner.
- The Indigenous Peoples and stakeholders will be made aware of the GRM system and procedures through awareness raising programs and consultation meetings.
- Establish a three-tier system of GRM to ensure easy access to GRM for affected Indigenous Peoples and rightsholders including vulnerable households – initial level of GRM at ward level, first level of GRM at IPP Support Unit, second level of GRM at the Rural/Municipality level, and third level of GRM at the Chief District Officer level.
- Allocate an adequate budget on a yearly basis to operationalize the GRM throughout the project cycle.

12: Budget, Financing and Review of the Plan

The NEA need to ensure allocation of adequate budget for the implementation of IPP programs (under four program pillars) for the project cycle. The governing body will decide annual budget allocation based on the annual program and activities approved by the governing board (or other institutional arrangement as appropriate).

A financial and human resource management procedural guideline will be developed in alignment with the IPP program implementation guideline.

The NEA will commit to provide continued support to Indigenous Peoples and the affected community during project operations.

The IPP needs to be reviewed to adapt with the changing context or other the potential emerging impacts on the Indigenous communities. In order to address such emerging impacts or changing contexts, the NEA ensures that the Indigenous Peoples' Plan is reviewed periodically against such changes. It will agree on frequency and timing of the review of the Plan, as well as agree on triggers for changing and improving the Plan as needed outside the planned review timeline. The review will ensure engagement of the affected Indigenous Peoples, community and relevant stakeholders through a participatory consultation process.

Flow Diagram for Indigenous Peoples' Plan Development


Community Mapping
• Provide brief description of the proejct and objectives
• Identification of the targeted Indigenous Peoples communities (community mapping)
Baseline Information
• Collection of Baseline information of the socio-economic, health, education and environmental profile of the indigenous community, their circumstances, livelihoods, capacities, natural resources, land management practices, social norms, tangible and intangible cultural heritage.
• Cultural, ritual, customoary, spiritual, traditional livelihoods, relationship with natural resources, land use and traditional governance practices related to land use, cultural heritage and spiritual sites
Impact and opportunities
• Consultation and engagement strategy
• Meaningful consultation and participation (FPIC)
• An analysis of potential impacts and opportunities and agreed culturally appropriate measures to mitigate adverse impacts and enhance opportunities and benefits to help identify the focus of the IPs support activities (Environmental and social risk assessment)
• Targets with interim milestones and an agreed schedule and responsibilities for implementation
Community Consultations and FPIC
• Consultations with Indigenous Peoples and different stakeholders in the affected areas to identify the impact mitigate measures and other development options
• Provide description of all engagement to date, including FPIC process(es) where appropriate. An overview of issues raised by the indigenous groups, and how they have been addressed.
Natural Resource and Cultural Heritage Management
• Where applicable, define how the natural resources upon which the affected indigenous groups depend, and the geographically distinct areas and habitats in which they are located, will be conserved, managed and utilised.
• Where cultural heritage of Indigenous Peoples is impacted, the Cultural Heritage Management Plan becomes part of the IPP. The IPP can also include actions around the enhancement of cultural heritage.
Program Design
• Define Indigenous Peoples' development principles and program areas based on the outcomes of the baseline and consultations.
• Propose activities for Indigenous Peoples in the affected areas to mitigate or reduce identified environmental and social risks and ensure a sustainable social and economic development
Grievance Management
• Develop culturally appropriate grievance management mechanism that will not interfere with any existing processes or institutions within the Indigenous Peoples community designed for settling disputes among them.
Program Action Planning with Budget
• Preparation of time-bound program action plan including the identified activities/measures
• Identification of potential partners and delivery mechanism for implementation of the Indigenous Peoples' plan
• Estiamte required budget for implementation of the plan and potential sources of the budget.
Monitoring, Evaluation an reporting
• Set out monitoring plan/framework with monitoring schedules, milestones, and evaluation indicators to monitor the effectivemeness of the Plan (participatory monitoring mechanism ensuring participation of the affected IPs).
• Identify key responsibilities for monitoring of the plan
• Set out mechanism for regular reporting on the implementation of commitments made in the Plan and progress towards achieving the agreed objectives of the Plan as agreed with the affected community.
Review of the Plan
• Agree on frequency and timing of the review of the Plan, as well as agreement on triggers for changing and improving the Plan as needed outside the planned review timeline.

Source: Adapted from the IUCN Environmental and Social Management System (ESMS), Indigenous Peoples Plan Guidance Note by Legacy Landscapes Fund (LLF) and the World Bank Group Indigenous Peoples Planning Framework.

Outline of Indigenous Peoples Plan

Executive Summary

This section concisely describes the critical facts, significant findings, and recommended actions.

A. Introduction

An introduction to the IPP and describes its purpose and structure. Also briefly describes the relevance of the document.

B. Purpose and Objectives of the IPP

Provide a brief description of the purpose of this IPP. Briefly state the objective of this IPP here.

C. Legal Framework, Applicable Standards and existing national strategies or plans

List and elaborate on applicable international and national legal frameworks and/or standards required for the development of an IPP

D. Description of the Project

This section provides a general description of the project; discusses project context, project components and activities that may bring impacts on IPs; and identifies the project area of influence.

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E. Socio-economic Baseline and Social Impact Assessment

This section:

- Identifies target Indigenous Peoples and affected villages with composition in the project area based on the Indigenous Peoples screening checklist
- Provides baseline information on the demographic, social, cultural, and political characteristics of the affected IP communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
- Identifies vulnerable or disadvantaged groups within the program area to facilitate future engagement with such groups and make arrangements in the engagement and decision-making process.
- Prioritizes the identification of key Indigenous stakeholders and develop a consultation strategy that is both culturally appropriate and gender-sensitive. By utilizing baseline information, the project aims to facilitate informed participation of Indigenous Peoples throughout all phases.
- Provides a thorough assessment of its potential effects on Indigenous communities, conducted through meaningful consultation. This assessment will specifically include a gender-sensitive evaluation of the risks and vulnerabilities faced by these communities, taking into account their unique relationship with land and natural resources, and their limited access to opportunities compared to other social groups.
- Includes a gender-sensitive assessment of the affected IPs' perceptions about the subproject and its impact on their social, economic, and cultural status.
- Through meaningful consultation, seeks to avoid adverse effects on Indigenous Peoples. If avoidance is not possible, the project will implement measures to minimize, mitigate, and compensate for any negative impacts, while also ensuring culturally appropriate benefits.

F. Consultation, Participation and Need for FPIC)

This section:

- Describes the consultation and engagement strategy and documents any engagements that have been conducted
- Describes the information disclosure, consultation and participation process with the affected IP communities that was carried out during project preparation;
- Identifies concerns raised during consultation and how these have been addressed in project design;
- Describe special circumstances requiring PFIC and selection of FPIC villages
- Documents the process and outcome of consultations with affected IP communities and any agreement resulting from such consultations for the subproject activities and safeguard measures addressing the impacts of such activities;
- Describes consultation and participation mechanisms to be used during implementation to ensure IPs participation during implementation; and
- Confirms disclosure of the draft and final IPP to the affected IP communities.

G. Impact Assessment and Mitigation Measures

This section:

- Specifies the social and environmental impacts of the project in Indigenous Peoples
- Analyses differential effects as per Indigenous Groups and economic status, and assesses the affected Indigenous Peoples' perception about the project and the impacts.
- Specifies the measures to avoid adverse impacts on Indigenous Peoples; and where the avoidance is impossible, specifies the measures to minimize, mitigate and compensate for identified unavoidable adverse impacts for each affected IP groups.
- Specifies the measures to ensure that the Indigenous Peoples receive social and economic benefits that are culturally appropriate, and gender responsive.
- Provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address IP issues in the subproject area; and (b) IP organizations in the subproject area to enable them to represent the affected IPs more effectively.
- Elaborates on measures that will be taken by the program to increase opportunities for IP.

H. Project Design

- This section describes the program design based on the four project benefits pillars:
    - Socio-cultural development program
    - Economic development program
    - Infrastructure development program
    - Capacity development program
- This section also assesses long-term issues and challenges of the program implementation and potential community benefits.

I. Governance and Institutional Arrangement

- This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the IPP. It also describes the process of including relevant local organizations and NGOs in carrying out the measures of the IPP.

J. Grievance Redress Mechanism

- This section describes the procedures to redress grievances by affected IP communities. It also explains how the procedures are accessible to IPs and culturally appropriate and gender sensitive.

K. Implementation Schedule, Human Resource and Budget

This section:

- Provides an itemized budget for all activities described in the IPP.
- Includes an implementation schedule/work plan
- Provides for an adequate summary of execution costs, budget and responsibility of financing, timing of expenditures, and organizational responsibilities for managing and administering program funds and expenses.
- Present information on roles and responsibilities for the implementation of the IPP.

L. Monitoring, Evaluation and Reporting

This section:

- Describes monitoring, evaluation and reporting mechanisms that the IPP will stipulate in order to track effectiveness of measures and adapt these, if necessary.
- Describes the mechanisms and benchmarks appropriate to the project for monitoring, and evaluating the implementation of the IPP.
- Specifies arrangements for participation of affected IPs in the preparation and validation of monitoring, and evaluation reports.
- Set up a monitoring plan to indicate parameters to be monitored, institute monitoring milestones and provide resources including responsible persons or institutions to carry out the monitoring activities.

M. Review and Change Management

- Describes the IPP revision and change management strategy of the program that ensures that the IPP stipulations are iterative and adaptive to real time management exigencies, and other unforeseen circumstances with a significant impact on the IPP program decision-making and activities.
- Describe the program adaptive management strategy, including adaptive management capacity building to respond to exigent and other unforeseen circumstances.

Annex 20: Cultural Heritage Management Plan

1. This Cultural Heritage Management Plan (CHMP) guidelines are prepared as a part of the Nepal Electricity Authority's Environmental and Social Management System. A Cultural Heritage Management Plan (CHMP) is an individual, site-specific plan developed for sites with cultural heritage risks and potential impacts. Cultural heritage resources play an important role, not only as historical information, but also as an economic and social asset for local communities and national development. A CHMP is prepared to protect cultural heritage from the adverse impacts of NEA project activities and manage the cultural heritage for the benefit of its users – local communities and Indigenous Peoples.
2. UNESCO has defined cultural heritage as artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance.[48] It includes tangible heritage (movable, immobile and underwater), intangible cultural heritage embedded into cultural, and natural heritage artefacts, sites or monuments. Cultural heritage is thus the heritage of tangible and intangible assets of a group or society that is inherited from past generations. Many cultural and natural heritage sites are home to indigenous peoples, while others are owned and managed by non-indigenous peoples. Many cultural and natural heritage sites are located on Indigenous Peoples' lands, and their land use, knowledge, cultural, and spiritual values and practices are often deeply connected to that heritage. Similarly, other type of cultural heritage includes natural areas with cultural and/or spiritual significance, such as sacred groves, bodies of water, waterways, trees, forests, and rocks. Cultural heritage, as recognized by the Asian Development Bank and World Bank Environmental and Social Standards (ESS), can be:

Tangible: Physical objects, sites, structures, natural features, landscapes, etc.

Intangible: Practices, expressions, knowledge, skills, etc.

3. Both tangible and intangible cultural heritage will be protected from project impacts. A CHMP plan, therefore, covers both types of cultural heritages- cultural heritages of Indigenous Peoples and other types of cultural heritage of cultural and/or spiritual significance. The NEA will take every possible step to avoid impacting cultural heritage, especially critical cultural heritage under this plan. A CHMP will be developed, either as a separate document or integrated into the Indigenous Peoples Plan (IPP), depending on the extent of the cultural heritage affected.
4. The key principles for the engagement with the users of cultural heritage and other relevant stakeholders including Indigenous Peoples include:
    - Early and meaningful engagement
    - Cultural appropriateness
    - Good faith negotiation
    - Inclusivity
    - Gender and age sensitivity
    - Involvement of experts

5. The Free Prior and Informed Consent (FPIC) will be triggered when the project will:

Impact the cultural heritages and related lands, territories, or resources.

[48] https://uis.unesco.org/en/glossary-term/cultural-heritage

- Relocate Cultural heritages.
- Involve the commercial development of cultural heritage.
- Potentially impact self-governance or social structures related to management and development of cultural heritages.

6. The NEA will adopt the following steps for development of a CHMP:

Step 1: Identification of cultural heritage sites, and objectives and scope of CHMP

Identify the tangible and intangible cultural heritage at the project site,

Describe the site or provide basic identification information such as name of the site, location with map, history, physical description including land use land cover, identification of administrative entity, function/use and other important characteristics, significance/value of the cultural heritage site, ownership, existing condition of the site and major threats.

Define the vision and objectives of the Plan

Explain the scope of the Plan

Identify the stakeholders for cultural heritage management plan, their interest and influence, and their inclusivity.

Step 2: Legal framework and requirement for developing CHMP

Describe the national legal requirements for development of cultural heritage management plan

Describe the international standards and guidelines for development of cultural heritage management plan

Identify the key institutions with a role in cultural heritage management in the project site

Step 3: Assessment of Cultural Heritage

7. This phase involves processing of the data collected during the identification phase. The following activities will be conducted in this phase.

Prepare baseline condition by assessing cultural heritage resources, state of conservation, socio-cultural and economic values, and their significance in the lives of local communities, Indigenous peoples and other affected people.

Conduct social and human rights impact and risk analysis as part of operational risk management.

Assess the risk and examine the types and extent of impacts (including damages and threats) on the cultural heritage site for a detailed and specific risk preparedness planning.

Conduct survey of cultural heritage as a part of the land use planning. The survey should:

Identify potential cultural heritage properties and prepare a list of the properties

Important customary/traditional practices related to the cultural heritage sties

GPS coordinates of the identified cultural heritage properties and sites

Constraints/sensitivities of the cultural heritage sites

Potential options to avoid impacting the heritage sites

Organize community consultations and stakeholder engagement for the assessment of cultural heritage and discuss potential impacts and planned mitigation measures and agree on management activities.

NEA will ensure participation of affected Indigenous peoples, local communities and stakeholders in the negotiation process from agreeing on the scope and purpose of the CHMP to contributing to and actively participating in the process of information collection and identification of the fields of action and development of work program and action plan.

NEA will also ensure participatory monitoring of progress against the program and action plan, and review the CHMP on a periodic basis (five years or as agreed with the affected communities)

NEA will conduct consultations with relevant authorities and stakeholders

Identification of Potential Impacts

Identify the potential or anticipated impacts on the cultural heritage sites and resources. The categories of impacts include direct impact within the footprint of proposed project activities, indirect impact and accidental impact.

To manage and protect identified cultural heritage, specific conditions must be met before, during, and after any activity. These conditions must be grounded in sound cultural heritage management principles, with avoidance of harm as the primary principle. If harm is unavoidable, the conditions will focus on mitigating the activity's impact.

Step 4: Action Plan Preparation

8. After conducting the assessment and survey of cultural heritage, the next step is to determine the cultural heritage management and impacts mitigation measures by preparing action plan for cultural heritage management plan. The management and mitigation measures aim to minimize damage to cultural heritage sites and resources. NEA will engage with communities and stakeholders in good-faith negotiations before making any action plan. If removing cultural heritage is unavoidable, NEA will obtain Free, Prior, and Informed Consent (FPIC) through extensive consultations.

9. The cultural heritage management action plan will include:

Specific SMART (Specific, Measurable, Attainable, Realistic and Time framed) objectives to achieve the vision of the Cultural heritage Management Plan

Structured approaches corresponding to each activity with precise definition of each activity, approximate budget required to implement the activity with budget source, risks and assumptions, expected outcomes and monitoring criteria.

Measures to avoid impacts on Indigenous Peoples' intangible cultural heritage whenever possible.

Identification and delineation of exclusion or restricted zones or activities inside the sites.

The organizations and/or individuals/communities to be involved in the management and protection of the cultural heritage and their roles and responsibilities.

Define and agree with affected communities and peoples on the management structure with the level of responsibility to implement the action plan.

Define institutional arrangements, such as cultural heritage management council, etc. for implementation of the action plan.

10. NEA will ensure that the Action Plan will allow future access of traditional owners/users to Cultural Heritage. The plan will have conditions within the cultural heritage management plan to allow Traditional Owners' continued access to cultural heritage sites within the activity area, both during and after the project. These conditions will include notification requirements for the project sponsor, landowner, and occupier, as well as any safety requirements they may have.
11. ***Implementation Schedule and Budget***: Once all potential impacts on cultural heritage have been analyzed, along with mitigation and compensation measures, the plan will include a detailed breakdown of implementation costs. This includes a budget, funding sources and responsibilities, expenditure timelines, and the organizational roles in managing and administering program funds. This section will also include a clear implementation schedule with roles and responsibilities of the users, Indigenous Peoples; and key stakeholders in the implementation.

Step 5: Awareness, Capacity Building and Resource Requirements

Design and implement awareness and capacity building interventions/activities to the concerned Indigenous Peoples, local communities and other key stakeholders with the potential to encounter tangible or intangible cultural heritage resources

Design and implement specific cultural heritage management and protection training to the concerned individuals, communities and stakeholders.

Ensure availability of the resources required for the implementation of the capacity building interventions.

Step 6: Grievance Redress mechanism

12. The cultural heritage management plan will include a section dedicated to grievance management within the project, specifically addressing how grievances related to the development, use and management of the cultural heritage will be handled. NEA projects affecting cultural heritages will adapt existing program-level grievance mechanisms (if any) to better suit their needs.
13. The project will document all meetings with the users of the cultural heritage, local communities, Indigenous Peoples and other key stakeholders, including any grievances raised. These grievances will be formally recorded within the grievance mechanism. If the project establishes a new grievance mechanism specifically for cultural heritages, it must comply with all applicable standards and provisions, including those outlined in the project's Environmental and Social Management System (ESMS) documents related to grievance and feedback mechanisms and serious incident reporting.
14. NEA will establish a close coordination and collaborate with relevant users, Indigenous groups, key stakeholders and experts for designing a new, inclusive grievance mechanism for cultural heritages. Crucially, NEA will ensure that the grievance redress mechanism is culturally appropriate and avoids interfering with existing dispute resolution processes or institutions within the cultural heritage user communities and stakeholders.

Step 7: Monitoring and Evaluation, and Reporting

15. The cultural heritage management plan will outline the monitoring, evaluation, and reporting mechanisms used to track the effectiveness of the plan's measures and

allow for adjustments as needed. This section will detail roles and responsibilities for monitoring and evaluation, monitoring frequencies, feedback processes, and corrective action procedures. Critically, these mechanisms must include provisions for ongoing information sharing and continued engagement and consultation with the affected users/owners of the cultural heritage, Indigenous Peoples' and other key stakeholders. This phase focuses on tracking the effectiveness of the plan for:

16. Maintaining current cultural heritage record, including descriptions of all sites, and incorporates this information into the CHMP.

Developing Key Performance Indicators (KPIs) to measure the success of prevention and mitigation measures, specifically focusing on outcomes and impacts.

17. The purpose of monitoring and evaluation of the cultural heritage management plan is to ensure that:

The actions and commitments outlined in the plan are fully and promptly implemented by the program.

Program activities, including construction, are closely monitored and any new land acquisition, compensation, or construction damage issues are identified and addressed.

Management measures shared with users, Indigenous Peoples and other stakeholder groups are fully implemented, granting the uses the agreed-upon autonomy over the cultural heritage and related resource management as specified in the plan.

The users of the cultural heritage receive full compensation within the agreed-upon timeframes.

The cultural heritage plan actions and compensation measures effectively enhance or restore living standards and income levels.

Complaints and grievances submitted by affected users, Indigenous Peoples or stakeholders are addressed, and appropriate corrective actions are taken.

18. A monitoring plan will be established, specifying the parameters to be monitored, setting monitoring milestones, and allocating resources (including responsible individuals or institutions) to carry out these activities. However, the specifics of this plan will vary depending on the nature and type of the cultural heritage and its resources, project context and the various actors involved.

19. The key components of the cultural heritage management plan are shown in the figure 1.

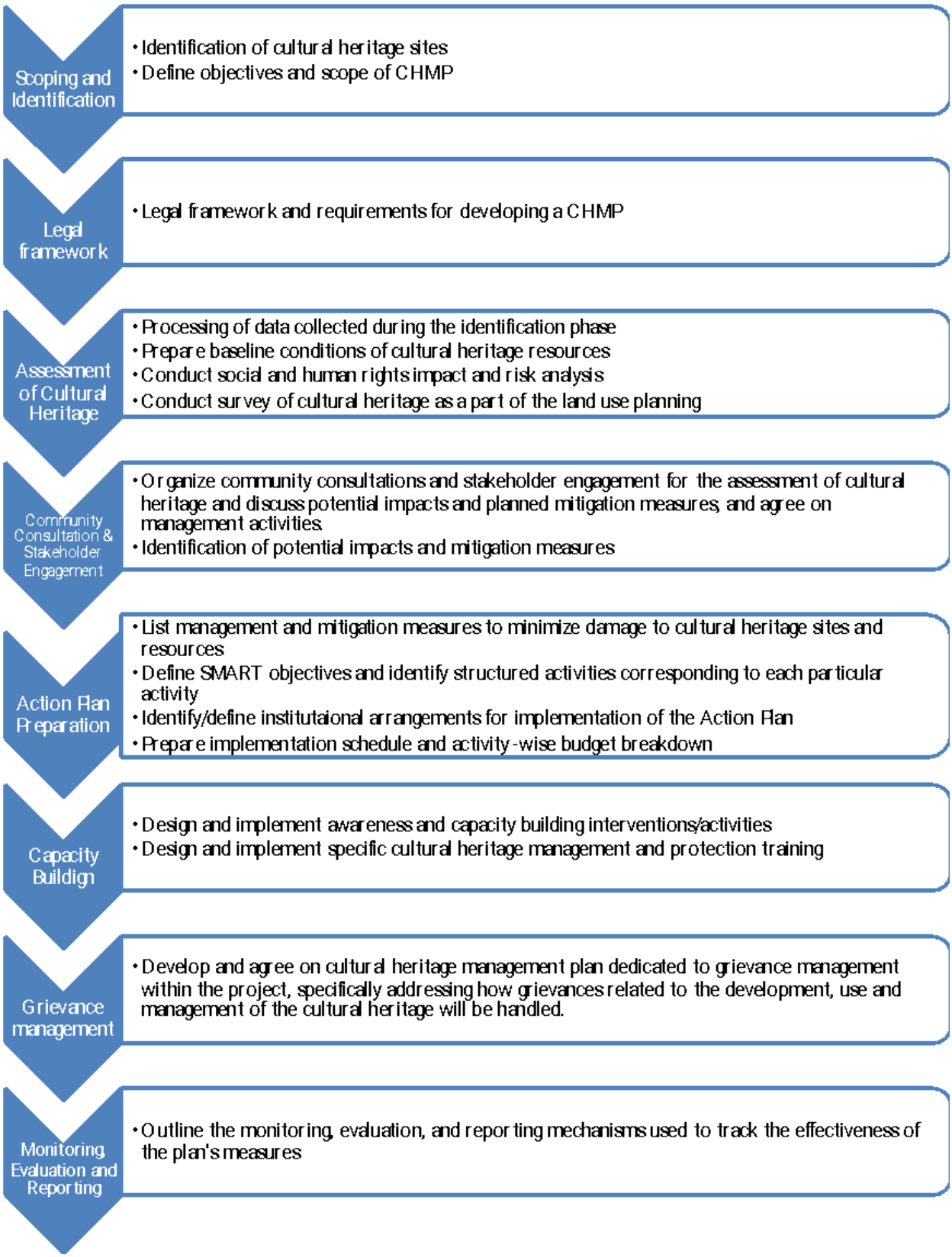

Figure 1: Key Components of Cultural Heritage Management Plan

Annex 21: Climate Risk Management Plan

1. Background

The objectives of the climate change related Environmental and Social Framework (ESS 9) of the Asian Development Bank (ADB) are to: (i) minimize absolute and relative GHG emissions attributable to a project by considering alternatives, and monitor and report project-related GHG emissions, where applicable; and (ii) manage project-related climate risks and contribute to enhancing climate resilience. The standard also requires borrowers and/or clients to undertake project-level CRA and implement adaptation measures for relevant projects. During the Project Preparation Phase, there is a need to assess climate risk and vulnerability context of the project whether there are any relevant climate risks from the project. If physical or other significant climate risks to the project is identified during the project preparation phase, a climate risk assessment (CRA) needs to be carried out which includes a detailed site-specific assessment of risks and identifying, developing and integrating adaptation and resilience measures. The project design must also be consistent with the host country's climate resilience policies and strategies[49]. Government of Nepal has approved number of policy instruments and documents including National Climate Change Policy 2019, Environment Protection Act 2019 and its Regulations 2020, Nationally Determined Contributions 2020 and its Implementation Plan 2023-2030, National Adaptation Plan 2021-2050, Environment and Social Risk Management Guidelines 2022, Green Finance Taxonomy Guidelines 2024 etc.

2. Introduction/Project Description

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Project Title:	
Project Components:	
Location:	
Estimated Cost:	
Start/Completion Date:	
Description:	The [name of the project] is being prepared under the ADB's Environment and Social Framework (ESS 9) on Climate Change, the implementing agencies should minimize the GHG emissions and manage project-related climate risks and contribute to enhancing climate resilience.

3. Objectives of the Climate Risk Management Plan

The objectives of the plan are to:

- Identify and assess the physical and other climate risks and impacts to vulnerable communities and workers, to community health and safety, and to biodiversity and natural resources;
- Develop and integrate adaptation and resilience measures during the project design and implementation stage.

[49] ADB. 2024. Environmental and Social Framework. Asian Development Bank, Manila

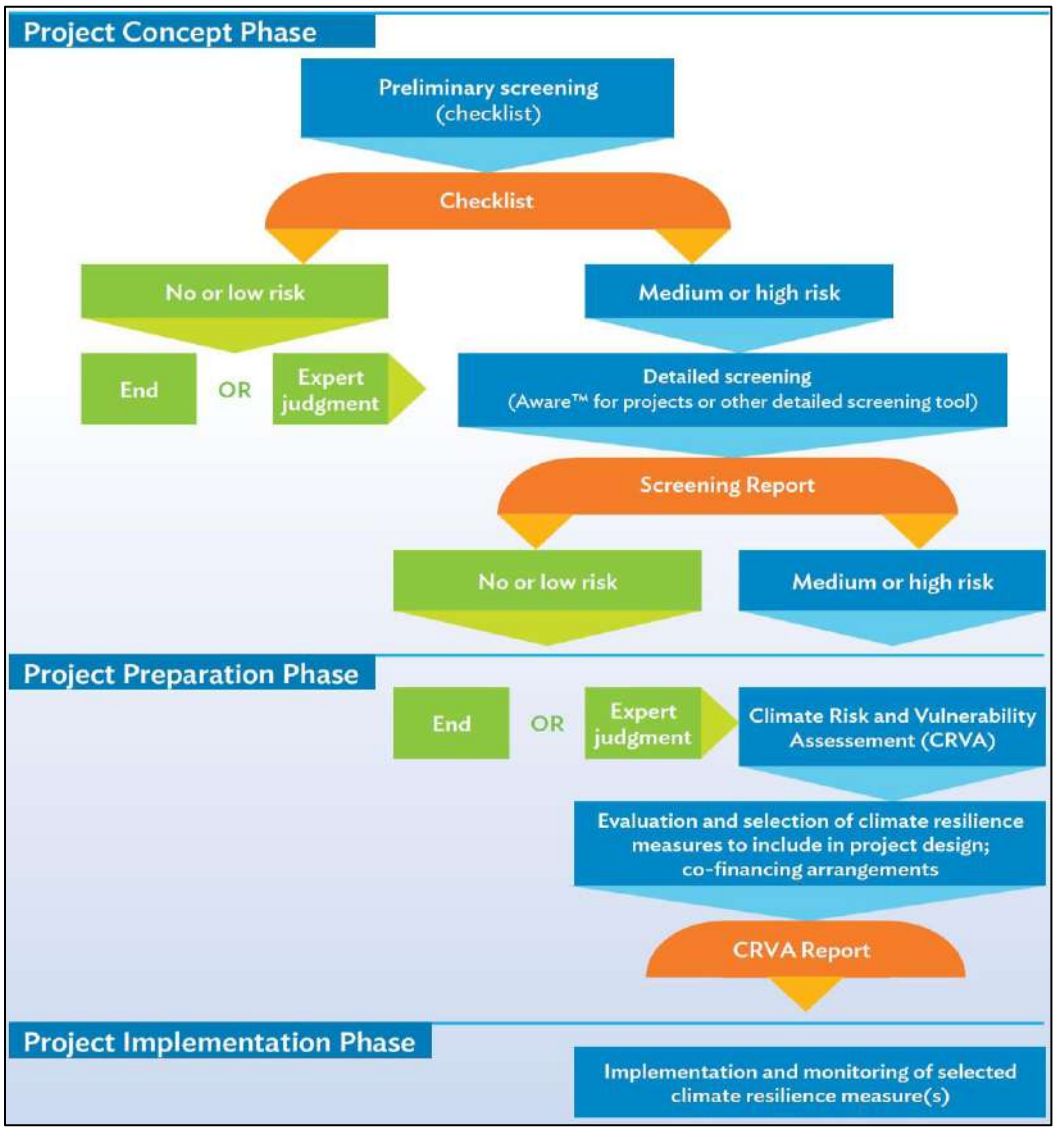

Figure: Climate Risk and Vulnerability Assessment[50]

4. Climate Risks Assessment and Management

Climate risks can be assessed through a climate risk assessment (CRA) which is a method for identifying the likelihood of future climate hazards and their potential impacts. A Climate Risk Assessment (CRA) is a prior assessment of a project to examine its climate risks in terms of project exposure, potential climate impacts and risk mitigation capacity. The Climate Risk Management Plan (CRMP) is used to ensure risk mitigation measures get implemented and provides the elements to monitor key climate risk variables. A CRMP can be part of an Environmental Management Plan. A CRA consists of the following typical components:

[50] ADB. 2017. Climate Risk and Vulnerability Assessment. Nauru: Sustainable and Climate-Resilient Connectivity Project. Asian Development Bank, Manila.

SN	Particulars	Areas/Actions
1	Context Analysis	• Understanding the geographic, socio-economic conditions, existing infrastructure, and environmental characteristics of the project area.
2	Identification of potential climate risks to the project	• Natural hazards such as heat waves, droughts, floods and other extreme events associated to climate change. • Analyzing the assets, people, and ecosystems that could be directly affected by the identified climate hazards. • Evaluating the susceptibility of the exposed elements to climate impacts, considering factors like socio-economic conditions, existing adaptation measures, and community resilience.
3	Assessment and Prioritization of risks	• The potential risks to be assessed and prioritized based on their severity and likelihood of occurrence.
4	Impact Analysis	• Assessing the potential impacts of climate change on the assets/infrastructure and communities, including economic, social, and environmental impacts. • Impacts on ecosystems and biodiversity: e.g. loss of habitats, disturbances in ecological conditions of animal and plant species, loss of forests, wildfires, disease and pest outbreaks, spreading of invasive species. • Impacts on land resources, e.g. landslides, acceleration in desertification and soil erosion processes. • Impacts on freshwater resources: e.g. reduced availability of water, changes in river flows, melting glaciers, salinity/chemical intrusions, rapid and early snowmelt in spring and summer, decrease in water quality, glacial melting. • Impacts on agriculture and fisheries e.g. decrease in fish stock, crop productivity, forestry production, in the productivity of livestock breeding activities and fish farming. • Other impacts affecting IPs and local communities and notably vulnerable groups: e.g. increased prevalence of diseases, population displacement, damage to infrastructure
5	Adaptation and Resilience Strategies	• Developing and evaluating potential adaptation measures to reduce climate risks, including cost-benefit analysis and implementation strategies. • Development of disaster prevention and preparedness plans. • Available adequate financial resources to support climate resilience and adaptation measures. • Existence of institutional arrangement and trained human resources. • Designing and adapting infrastructure to withstand extreme weather events. • Implementing energy-saving technologies, promoting renewable energy sources like solar or wind power. • Promoting fuel-efficient vehicles in project operations. • Optimizing waste reduction, recycling, and responsible disposal practices.
6	Development of CRA report	• A comprehensive CRA report to be prepared.
7	Development of a CRMP	• A detailed CRMP to be prepared that includes identification of potential climate-related hazards, analysis of vulnerability, prioritization of risks, development of adaptation strategies, implementation plan with assigned responsibilities, monitoring and review mechanisms, and communication strategies to engage stakeholders regarding climate risks and mitigation efforts.

5. GHG Emissions Monitoring

The *2006 IPCC Guidelines* continue to provide a technically sound methodological basis for measuring national greenhouse gas inventories, with the most recent refinement being the "2019 Refinement" to the 2006 guidelines. The guidelines outline specific methodologies for calculating emissions from different sectors, including energy production, industrial processes, agriculture, forestry, and waste management[51]. Based on the 2006 IPCC Guidelines, Nepal's GHG inventory accounted the emissions and removals from the four sectors namely Energy; Industrial processes and product use (IPPU); Agriculture, forestry, and other land use (AFOLU); and Waste[52]. There are two main sources of GHG emissions: first, direct and indirect emissions associated with the construction of the plants; second, emissions from decaying biomass flooded by land flooded by reservoirs[53]. Life Cycle Analysis gives complete picture of GHG emissions that considers emissions from construction, operation, and decommissioning phases of the hydropower project.

6. Capacity Development

Since the climate change has been included for the first time in the ESF of the ADB, there is limited expertise, lack of emission data, unavailability of standard methods, measurement techniques, modelling, etc. in Nepal for developing CRMP including GHG emission inventory of a specific project. The capacity development training is included in the cost estimate below.

7. Cost Estimate

Budget Category	Quantity	Unit Costs	Times/Years	Total Costs	Remarks
1. Estimated staff salaries* and related expenses					
1a. [E.g., Climate change consultant]					
1b. [E.g., travel costs for staff]					
1c. [E.g., estimated salaries for Field Liaison Officers]					
2. Events					
2a. [E.g., organization of focus groups]					
3. Communication campaigns					
3a. [E.g., posters, flyers]					
3b. [E.g., social media campaign]					
4. Trainings					
4a. [E.g. training on conpect of climate vulnerability and risks, potential impacts, adaptation and resilience measures for PIU and contractor staff]					

[51] IPCC. 2019. Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Intergovernmental Panel on Climate Change, Geneva.

[52] MoFE. 2021. Nepal's Third National Communication to The United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Forests and Environment, Kathmandu.

[53] Luc Gagnon, Joop F. van de Vate. 1997.Greenhouse gas emissions from hydropower: The state of research in 1996. *Energy Policy* 25 (1): 7-13.

4b. [E.g., training on climate risk assessment for PIU and contractor staff]					
4c. [E.g., training on GHG emissions monitoring for Project Implementing Unit (PIU) and contractor staff]					
5. Surveys/Field Work					
5a. [E.g., Project Preparation Phase]					
5b. [E.g., Project Design Phase]					
7. Other expenses					
7a. [insert]					
TOTAL CRMP BUDGET:					

8. Climate Risk Management Plan Matrix

The matrix highlights the anticipated site-specific adverse climate risks and impacts; describes mitigation measures to address these risks and impact; and lists the monitoring measures necessary to ensure effective implementation of the mitigation measures.

Anticipated Climate Vulnerability, Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Impact/Mitigation Monitoring		
		Location/Timing/Frequency	Responsibility	Parameter to be monitored	Methodology, including Location and Frequency	Responsibility

9. Review and Approval

Prepared By: ……(Signature) Position: …… Date ……	
Reviewed By: …… Signature: …… Position: …….. Date: ……	**Approved By**: …… Signature: …… Position: ……... Date: ……

Annex 22: Stakeholder Engagement Plan

1. Introduction/Project Description

[*Insert short project background, project objectives, components, and location. Map(s) can be added in the document or in annexes].*

The [*name of project*] comprises the following components: [*list components and short description*] *[list locations]*

2. Objective/Description of SEP

The overall objective of this SEP is to define a program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle. The SEP outlines the ways in which the [*name of the implementing agency*] will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about the project and any activities related to the project. The SEP specifically emphasizes methods to engage groups considered most vulnerable and that are at risk of being left out of project benefits.

H. 3. Stakeholder identification and analysis per project component

3.1 Methodology

For the [*name of project*], the following stakeholders have been identified and analyzed per project component. These stakeholders include affected parties (as defined in section 3.2), other interested parties (as defined in section 3.3) and disadvantaged/vulnerable individuals or groups (as defined in section 3.4).

3.2. Affected parties

Affected parties include local communities, community members and other parties that may be subject to direct impacts from the Project. Specifically, the following individuals and groups fall within this category: [*add list of possible affected parties categorized by project component*].

3.3. Other interested parties

The projects' stakeholders also include parties other than the directly affected communities, including: [*add list of other possible stakeholders].*

3.4. Disadvantaged / vulnerable individuals or groups[i]

Within the Project, the vulnerable or disadvantaged groups may include but are not limited to the following: [*add list of possible vulnerable groups per each project component and possible barriers they may encounter in accessing information or other project benefits].*

Vulnerable groups within the communities affected by the project will be further confirmed and consulted through dedicated means, as appropriate. Description of the methods of engagement that will be undertaken by the project is provided in the following sections.

4. Stakeholder Engagement Program

4.1. Summary of stakeholder engagement done during project preparation

During project preparation, the following public consultation meetings will be/were conducted [*insert table listing meetings, venue, number of participants and key issues discussed]*.

4.2. Summary of project stakeholder needs and methods, tools and techniques for stakeholder engagement.

The Stakeholder Engagement Plan below outlines the engagement process, methods, including sequencing, topics of consultations and target stakeholders.

Table 1: SEP Summary Table

Project stage	Target stakeholders	Topic of consultation / message	Method used	Responsibilities	Frequency/Timeline
Indicate whether it is: *- Preparation stage* *-Implementation stage*	*Examples may include: General Public, Indigenous Peoples, Dalit, persons with disabilities.*	*Examples may include:* *- Present the project and receive feedback on project activities.* *- Inform on progress,* *- Consult on key risks* *- Note public events to disseminate the results* *- Give information on GM*	*Examples may include:* *- Focus Group Meetings/ Discussions* *- Community consultations* *- Formal meetings* *- Virtual discussions or surveys* *- One-on-one interviews* *- Site visits*	*Name the department/ unit in charge of stakeholder engagement activities*	*Add either specific dates or a given frequency (either MM/YY, or "monthly" / "quarterly" / "twice a year")*

4.3. Proposed strategy to incorporate the views of vulnerable groups

8. The project will seek the views of [*vulnerable or disadvantaged groups identified*] through the following methods [*indicate methods of engagement*]. The following measures will be taken in order to remove obstacles to full and enabling participation / access to information: [*Indicate measures here*][ii]

5. Resources and Responsibilities for implementing stakeholder engagement

5.1. Implementation Arrangements and Resources

The [*insert*] will be in charge of stakeholder engagement activities. The entities responsible for carrying out stakeholder engagement activities are [*insert*]. The overall responsibility for SEP implementation lies with the Project Manager.

The project's stakeholder engagement implementation arrangements are as follows: [*insert*][54]

The stakeholder engagement activities will be documented through [*insert*]

[54] Integrate provisions for the mobilization of technical expertise for safe consultations with vulnerable groups, and/or on sensitive topics, as and when needed.

The budget estimate for the preparing and implementing SEP is [*insert the total estimated amount*]. The budget breakdown can be found in Annex 2. See the sample budget line items listed in Annex 2.

6. Grievance Mechanism

A Grievance Mechanism is a system that allows not only grievances, but also queries, suggestions, positive feedback, and concerns of project-affected parties related to the environmental and social performance of a project to be submitted and responded to in a timely manner.

6.1. Description of Grievance Mechanism (GM)

Table 2: Illustrative Table on the GM Steps - to be adjusted to each project

[Step	**Description of process (e.g.)**	**Timeframe**	**Responsibility**
GM implementation structure	[*Describe, for example, GM structure at national, regional, and local levels]*		
Grievance uptake	Grievances can be submitted via the following channels [*select and specify as appropriate*] • Toll-free telephone hotline: [*include number*] operated by [*insert*] • Short Message Service (SMS) to [*include number*] • E-mail to [*insert*] • Letter to [*insert*] • In-person at a physical facility [*specify where*] • Grievance or suggestion boxes located [*insert locations*] • Social media [*insert relevant social media accounts*] • Tablet/smartphone application [*specify*] • Online form on the following website: [*insert*]		
Sorting, processing	Any complaint received is forwarded to [*insert*]; logged in [*insert*]; categorized according to the following complaint types: [*insert*]	Upon receipt of complaint	Local grievance focal points
Acknowledgement and follow-up	Receipt of the grievance is acknowledged to the complainant by [*insert*]	Within 2 days of receipt	Local grievance focal points
Verification, investigation, action	Investigation of the complaint is led by [*insert*] A proposed resolution is formulated by [*insert*] and communicated to the complainant by [*insert*]	Within 10 working days	Complaint Committee composed of *[insert]*

[Step	Description of process (e.g.)	Timeframe	Responsibility
Monitoring and evaluation	Data on complaints are collected in [*insert*] and reported to [*insert*] every [*insert*]		
Provision of feedback	Feedback from complainants regarding their satisfaction with complaint resolution is collected [*insert*]		
Training	Training needs for staff/consultants in the PIU, Contractors and Supervision Consultants are [*insert*]		
If relevant, payment of reparations following complaint resolution	[*If relevant, describe how payment of reparations will be handled including amounts, recipients, etc.]*		
Appeals process	[*Describe how appeals will be handled when/if the complainants are not satisfied with the proposed resolution of the complaint]*		

[*Insert a few sentences about the Labor GM, which should be described in detail in the Labor Management Procedures and other project documents*].

[*Integrate a section to describe how Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) complaints will be safely and ethically received and managed, through the different stages of the GM, as and where possible*].[55]

7. Monitoring and Reporting

7.1. Summary of how SEP will be monitored and reported upon (including indicators)

The SEP will be monitored based on both qualitative reporting (based on progress reports) and quantitative reporting linked to results indicators on stakeholder engagement and grievance performance.

SEP reporting will include the following:

(i) Progress reporting on the ESS10-Stakeholder Engagement commitments under the Environmental and Social Commitment Plan (ESCP)

(ii) Cumulative qualitative reporting on the feedback received during SEP activities, in particular (a) issues that have been raised that can be addressed through changes in project scope and design, and reflected in the basic documentation such as the Project Appraisal Document, Environmental and Social Assessment, Resettlement Plan, Indigenous Peoples Plan, or SEA/SH Action Plan, if needed; (b) issues that have been

[55] In some projects, the GM could be adapted to receive SEA/SH allegations/complaints. If so, the responses should follow a survivor-centered approach that prioritizes survivors' dignity, confidentiality and safety, and the project accountability and response framework.

raised and can be addressed during project implementation; (c) issues that have been raised that are beyond the scope of the project and are better addressed through alternative projects, programs or initiatives; and (d) issues that cannot be addressed by the project due to technical, jurisdictional or excessive cost-associated reasons. Minutes of meetings summarizing the views of the attendees can also be annexed to the monitoring reports.

(iii) Quantitative reporting based on the indicators included in the SEP. An illustrative set of indicators for monitoring and reporting is included in Annex 3.

7.2. Reporting back to stakeholder groups

The SEP will be revised and updated as necessary during project implementation.

[*Quarterly or other*] summaries and internal reports on public grievances, enquiries, and related incidents, together with the status of implementation of associated corrective/preventative actions will be collated by responsible staff and referred to the project managers.

Specific mechanisms to report back to the stakeholders include the following [*insert the specific mechanism/avenues to be used by the project to report back to the stakeholder groups that have been/will be consulted*] This reporting back to the stakeholders will be [*insert the timeline/frequency of such reporting]*.

Annexes

- Annex 1. Template to capture minutes/records of consultation meetings
- Annex 2. Example of a SEP Budget Table
- Annex 3. Sample Table: Monitoring and Reporting on the SEP

Other Annexes can include:

- Visual summaries such as stakeholder mapping or stakeholder diagrams
- Grievance submission form
- Project maps (if applicable)

Annex 1: Template to Capture Consultation Minutes

Stakeholder (Group or Individual)	Summary of Feedback	Response of Project Implementation Team	Follow-up Action/Next Steps

Annex 2: Example of a SEP Budget Table

Budget categories	Quantity	Unit costs	Times/ Years	Total costs	Remarks
1. Estimated Staff salaries* and related expenses					
1a. *E.g., Communications consultant*					
1b. *E.g., Travel costs for staff*					
1c*. E.g., Estimated salaries for Community Liaison Officers*					
2. Consultations/ Participatory Planning, Decision-Making Meetings					
2a. *E.g., Project launch meetings*					
2b. *E.g., Organization of focus groups*					
3. Communication campaigns					
3a. *E.g., Posters, flyers*					
3b. *E.g., Social media campaign*					
4. Trainings					
4a. *E.g., Training on social/environmental issues for PIU and contractor staff*					
4b. *E.g., Training on Gender-Based Violence (GBV) for PIU and contractor staff*					
5. Beneficiary surveys					
5a. *E.g., Mid-project perception survey*					
5b. *E.g., End-of-project perception survey*					
6. Grievance Mechanism					
6a. *E.g., Training of GM committees*					
6b. *E.g., Suggestion boxes in villages*					
6c. *E.g., GM communication materials*					

6d. E.g., Grievance investigations/site visit					
6e. E.g., GM Information System (setting up or maintenance)					
6f. Other GM Logistical Costs					
7. Other expenses					
7a. …					
TOTAL STAKEHOLDER ENGAGEMENT BUDGET:					

*Note: Salary costs can be indicative

Annex 3. Sample Table: Monitoring and Reporting on the SEP

Key evaluation questions	Specific Evaluation questions	Potential Indicators	Data Collection Methods
GM. To what extent have project-affected parties been provided with accessible and inclusive means to raise issues and grievances? Has the implementing agency responded to and managed such grievances?	• Are project affected parties raising issues and grievances? • How quickly/effectively are the grievances resolved?	• Usage of GM and/or feedback mechanisms • Requests for information from relevant agencies. • Use of suggestion boxes placed in the villages/project communities. • Number of grievances raised by workers, disaggregated by gender of workers and worksite, resolved within a specified time frame. • Number of Sexual Exploitation, and Abuse/Sexual Harassment (SEA/SH) cases reported in the project areas, which were referred for health, social, legal and security support according to the referral process in place. (if applicable) • Number of grievances that have been (i) opened, (ii) opened for more than 30 days, (iii) resolved, (iv) closed, and (v) number of responses that satisfied the complainants, during the reporting period disaggregated by category of grievance,	Records from the implementing agency and other relevant agencies

		gender, age, and location of complainant.	
Stakeholder engagement impact on project design and implementation. How have engagement activities made a difference in project design and implementation?	• Was there interest and support for the project? • Were there any adjustments made during project design and implementation based on the feedback received? • Was priority information disclosed to relevant parties throughout the project cycle? 289.	• Active participation of stakeholders in activities • Number of actions taken in a timely manner in response to feedback received during consultation sessions with project affected parties. • Number of consultation meetings and public discussions where the feedback and recommendation received is reflected in project design and implementation. • Number of disaggregated engagement sessions held, focused on at-risk groups in the project.	Stakeholder Consultation Attendance Sheets/Minutes Evaluation forms Structured surveys Social media/traditional media entries on the project results
Implementation effectiveness. Were stakeholder engagement activities effective in implementation?	• Were the activities implemented as planned? Why or why not? • Was the stakeholder engagement approach inclusive of disaggregated groups? Why or why not?	• Percentage of SEP activities implemented. • Key barriers to participation identified with stakeholder representatives. • Number of adjustments made in the stakeholder engagement approach to improve projects' outreach, inclusion and effectiveness.	Communication Strategy (Consultation Schedule) Periodic Focus Group Discussions Face-to-face meetings and/or Focus Group discussions with Vulnerable Groups or their representatives